EVALUATING RURAL PUBLIC TRANSPORTATION

Final Report

February 1977

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16. Abstract

The Final Report of the first year of research on Evaluating Rural Public Transportation Demonstrations includes case studies, baseline data, and summaries of the Section 147 demonstration planning process for four rural public transportation systems: the Appalachian Ohio Regional Transportation Association (AORTA), Athens, Ohio; the Qualla Public Transportation System, Cherokee, North Carolina; the Progress for People Human Resource Agency (HRA), Dunlap, Tennessee; and the Pee Dee Regional Transportation Authority (PDRTA), Florence, South Carolina.

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SUMMARY

EVALUATING RURAL PUBLIC TRANSPORTATION DEMONSTRATIONS

FIRST YEAR ACTIVITIES

The research collected and analyzed information that would contribute toward a realistic and coordinated rural transportation policy. The approach was to develop an evaluation model and collect baseline, planning, and operations data on Section 147 demonstration projects in a nineteen state area of southeastern United States. The specific tasks during the first year were:

Task 1. To compile a list of rural transportation planners and managers.

Task 2. To review evaluation measures and factors influencing those measures.

Task 3. To develop an evaluation model.

Task 4. To prepare a data collection plan.

Task 5. To collect base-line data and information to assess the

a. system's performance.
b. impact on riders.
c. impact on the community as a whole.
d. extent of inter-agency coordination.
e. future viability of the system.

The research began November 1, 1975, one month after the demonstration projects were selected.*

The research prepared and computerized a list of about 500 names of persons interested or involved with rural transportation (Task 1). Alternative evaluation techniques and measures of effectiveness and efficiency were reviewed (Task 2 - see Quarterly Report II). It was discovered that FHWA had contracted with Ecosometrics (Jon Burkhardt) to develop an evaluation model and forms for monitoring and evaluating all Section 147 projects.

*Forty-five projects were initially selected in September 1975.

The FHWA procedures and forms would provide baseline data and information to measure those things identified in our Task 5.

To avoid duplication, the N. C. A&T research staff initiated a meeting with its technical monitor and FHWA to revise its research objectives and to select five projects for detailed study. The five sites selected were:

1. Qualla Public Transportation System, Cherokee, North Carolina
2. Progress for People Human Resource Agency, Dunlap, Tennessee
3. Appalachian Ohio Regional Transportation Association, Athens, Ohio
4. Pee Dee Regional Transportation Authority, Florence, South Carolina
*5. Hancock County, Kingsport, Tennessee.

The revised objectives for the remainder of the first year and the second year include collecting and analyzing information relevant to:

1. the planning process
2. operations (low cost alternatives, barriers promotion)
3. system non-users (agencies)
4. case studies
5. developing rural public transportation policies.

FIRST YEAR FINAL REPORT

Overview:

The first year final report of "Evaluating Rural Highway Public Transportation Demonstrations" has three major parts, the summary; case studies and baseline data, and planning summaries. Each of these is described next as well as major research products not included in first year final report. It is important to note that the individual reports and summaries have been reviewed by the respective system directors. This type of review is not common, but it is necessary for accurate reporting.

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*The Hancock County system began limited service February 18, 1977. The research team will make its first contact and visit in the spring of 1977.

Case Studies and Baseline Data

The case studies of the four rural transportation systems include more detailed treatment of the characteristics of the areas served, the histories and operating experience of the systems, and their financing.

A comparison of the four systems reveals strong similarities and some interesting differences. Three systems are expansions of existing services. The PDRTA coordinates existing services but is a new entity with a new director.

Three of the four systems (Qualla excepted) base their service on the coordination of separate previously existing agency services. All four, however, serve the general public.

AORTA, HRA and PDRTA are roughly comparable in scale, both as to area and population served, and size of operation (number of vehicles, personnel, funding). See Table 5. The Qualla system is much smaller in all respects.

The managers of all four systems are outstanding in their ability to cope with the problems, human and technical, that beset existing and experimental transportation programs. All have shown the initiative needed to plan system expansions and adjust to changing conditions.

Planning Summaries

Planning summaries were completed for:

1. Qualla Public Transportation System
2. Progress for People Human Resource Agency (HRA) Rural Transportation System
3. Appalachian Ohio Regional Transportation Association (AORTA)
4. Pee Dee Regional Transportation Authority.

The summaries attempted to document the time frame, man hours*, activities, and problems during three phases of the planning process for each of the systems. The phases were:

1. Prior to proposal submission
2. After submission and prior to notification
3. After notification.

Tables II through V highlight the results of the planning summaries.

*Only two systems could provide estimates of the manhours associated with planning activities.

TABLE I - SYSTEM CHARACTERISTICS

	AORTA	Qualla	HRA	PDRTA
Area	4-7 counties	4 counties	10 counties	6 counties
Service type	F-R, D-R	F-R	D-R	F-R, D-R
New/Expanded	Exp.	Exp.	Exp.	Exp.
Client Groups	G.P.	G.P.	G.P.	G.P.
Trip Types	W/NW	W/NW	NW	W/NW
# Vehicles	18	3	39	68
Coordination	yes	no	yes	yes

F-R= Fixed Route Exp= Expanded W= Work Trips

D-R=Demand Responsive G.P.= General Public NW= Non-work Trips

TABLE II - TIMING

	Qualla	AORTA	Pee Dee	HRA
When first heard of 147 funding	10-1974 12-1974*	1973	1974	3-1975
When submited Proposal	6-1975	6-1975	6-1975	6-1975
When first heard of notification of acceptance	9-1975	9-1975	9-1975	9-1975
When first implemented funds	6-1976	3-1976	12-1976	6-1976

*preliminary proposal

TABLE III - PLANNING ACTIVITIES

I. Prior to Proposal Submission but after hearing of 147 Funds:				
A. Major Activities				
1. Identify existing transportation services in-order to determine unmet travel needs	X	X	X	X
2. Estimate of demand and budget requirements for proposed system	X	X	X	X
3. Contact local and/or state agencies, businesses, etc.	X	X	X	X
B. Problems				
1. More time to plan prior to proposal deadline	2 mos.*	6 mos.	4-6 mos.	20 days**
2. High fuel and maintenance cost of existing fleet	X			
3. Trouble obtaining commitment of local govrn't support and assistance		X		

* Amount of time the system had to plan

** Time to write after rcceiving final guidelines

TABLE IV -PLANNING ACTIVITIES

	Qualla	AORTA	Pee Dee	HRA
II. After Submission and Prior to Notification of Acceptance				
A. Major Activities				
1. Identifying existing transportation sources	X	X	X	
2. Identify or determine existing unmet travel needs	X	X	X	
3. Estimate demand for proposed system	X	X	X	
4. Seeking support	X	X	X	X
5. Planning e.g. election of committee(s), board, assessing financial resources, etc.		X	X	
6. Seeking Political solidification			X	X
B. Problems				
No major problems identified				

TABLE V -PLANNING ACTIVITIES

	Qualla	AORTA	Pee Dee	HRA
III. After Notification of Acceptance of 147 Funds				
A. Major Activities				
1. Promotion of proposed system to public	X	X		
2. Determine public opinion	X	X		
3. Estimate cost and revenue	X	X	X	X
4. Continuing previous planning policies	X	X	X	X
5. Hiring of manager or consultant, or advisory committee			X	
B. Problems				
1. Reporting forms or lack of sufficient funds to complete	X	X		X
2. Finding manager/ director			X	
3. Obtaining reasonably priced insurance			X	

Despite the differences in the systems it is clear that the past experience of the Qualla, HRA, and AORTA systems has enabled them to begin service sooner than entirely new systems. The new systems (Pee Dee and others across the nation) had to hire a director, drivers, write vehicle specifications, obtain insurance, learn about contracts, etc. Also despite differences in experience and staff all the project managers felt that more time (at least 6 months) was necessary to do the initial planning and obtain commitments. This means that there should be at least six months between the time the final guidelines are issued and when proposals are due . Also, they felt that more information was being requested than necessary for monitoring and evaluation. (See FHWA Conference Summaries)

Other Major Research Products of the First Year not Included in the Final Report

The following is a list of major research products completed during the first year that are not included in the final report but identified here for the readers' information:

1. Rural Public Transportation Bibliography
2. Review of evaluation techniques and measures of effectiveness and efficiency
3. Proceedings from the First National Conference on Rural Public Transportation
4. Summaries of the four Section 147 Conferences held in November and December 1976
5. Summaries of site visits
6. Overviews on coordination, driver training and promotion for rural systems.

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CASE STUDY

THE QUALLA PUBLIC TRANSPORTATION SYSTEM

INTRODUCTION

The Qualla Public Transportation System serves the Qualla Tract of the reservation of the Eastern Band of Cherokee Indians in Western North Carolina. It provides transportation within the reservation and between the reservation and the nearby towns of Bryson City and Sylva.

The service, began in 1970 with two used school buses, with the assistance of a Section 147 Demonstration Program grant. These were replaced and an additional vehicle purchased. The following is a description of the background, setting, origin and operation of the System.

BACKGROUND

The history of the Eastern Band of Cherokee Indians (EBCI) is a rich and tragic chapter in American history. Authorities on American Indian history claim the Cherokee nation once was the largest, strongest, and most significant of all American Indian tribes, comprising a population of twenty to thirty thousand. An estimate of 1720 counted a population of 20,000, including 6,000 fighting men, living in 64 villages and towns in North and South Carolina.

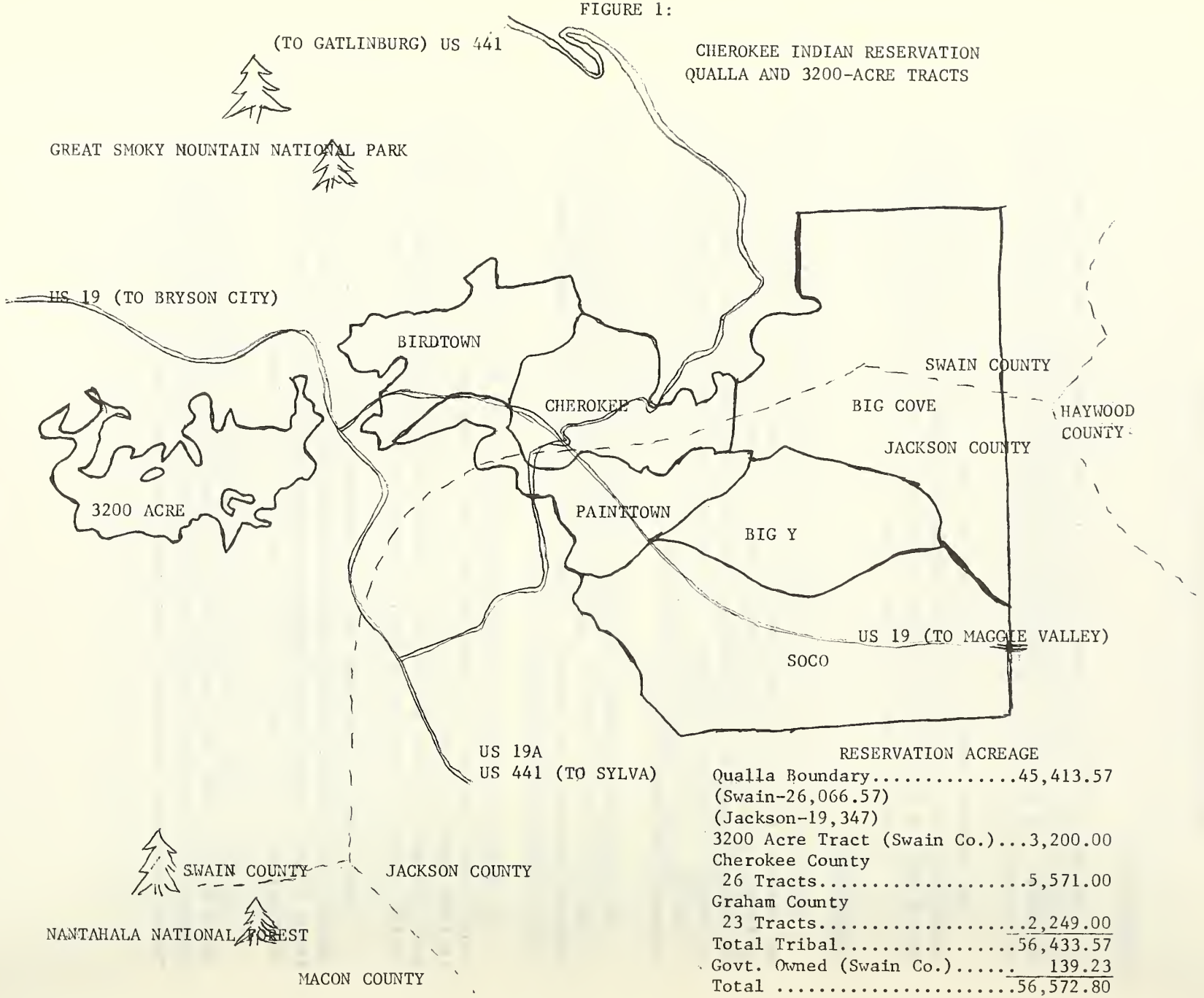
By 1800 the Cherokees had made thirteen treaties ceding to the United States approximately 82,277 square miles of land. They remained in recognized possession of nearly 43,000 square miles, which was almost entirely lost in later years.

At present there are about 8,000 Eastern Band Cherokees. Of these, about 5,000 live on the reservation, which comprises about 56,573 acres in five Western North Carolina counties. Four of these counties (Cherokee, Graham, Jackson and Swain) contain the Cherokee population; the fifth, Haywood, contains a Tribal Reserve but no Indian residents.

Lands owned by the EBCI include scattered tracts between Murphy and Andrews in Cherokee County, and around Robbinsville in Graham County. These tracts comprise the Snowbird community, and are not part of the area served by the Qualla Public Transportation System.

The major areas of the reservation include a 3,200-acre tract in Swain County, and the Qualla Tract, in Swain and Jackson Counties (See Figure 1). The Qualla Tract is subdivided into the following communities: Birdtown, Cherokee, Painttown, Big Cove, Big Y, and Soco.

FIGURE 1:



RESERVATION ACREAGE

Qualla Boundary	45,413.57
(Swain-26,066.57)	
(Jackson-19,347)	
3200 Acre Tract (Swain Co.)	3,200.00
Cherokee County	
26 Tracts	5,571.00
Graham County	
23 Tracts	2,249.00
Total Tribal	56,433.57
Govt. Owned (Swain Co.)	139.23
Total	56,572.80

DEMOGRAPHIC

A complete historical and demographic account of the Eastern Band of Cherokee Indians was published in July, 1974.[1] Over 97% of the population is classified as rural non-farming. From a simple life of farming and forestry the Cherokee economy has changed into one that is complex and diverse. Tourism and light industry are the principal sources of income. The Cherokee Indian reservation is a major tourist attraction in Western North Carolina. Approximately 8 million people visited the reservation in 1976.

Industry in the Cherokee reservation is found entirely within the Qualla Tract. Two of the manufacturing plants, the Cherokees and the Warrior Woodcrafts, produce items sold in craft shops and therefore are tourist-oriented industries. In addition, there are many bussinesses, including motels, restaurants, campsites, gift shops and service stations which are largely or entirely dependent on the tourist trade. A comprehensive list of industries and bussinesses, both Indian-and-non-Indian-operated, and an analysis of seasonal and non-seasonal employment, can be found in the Comprehensive Plan -- Volume I.[2]

Owing to the seasonal nature of much of the available work (directly related to tourism in the area), unemployment during the peak-months, June through September, may drop to less than one percent, while during the other eight months of the year it will climb to between twenty and thirty percent. Male workers are more seriously affected than females by fluctuations in employment.[3]

Of the reservation's population, over 52% of all families, and nearly 55% of all individuals, have incomes below the poverty level. Census figures of 1970 indicate that the percentage of Eastern Band Cherokee families living below the poverty threshold is nearly three times the average for the State of North Carolina and nearly five times the national average.[4]

The problem of unemployment, and the seasonal nature of much available work, has been compounded by a lack of dependable transportation within the means of reservation residents.

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[1]Eastern Band of Cherokee Indians. Comprehensive Plan -- Volume I; Population and Economy Study, Eastern Band of Cherokee Indians. Raleigh, North Carolina. N.C. Department of Natural and Economic Resources, Division of Community Services. July 22, 1974.

[2]op. cit., pp. 111-133.

[3]Comprehensive Plan -- Volume I, pp. 87-92.

[4]Comprehensive Plan -- Volume I, pp. 63, 65.

ADMINISTRATION

Virtually all actions and decisions that pertain to the reservation are made or influenced by the Tribal Council. Each of the six voting districts (Big Cove, Birdtown, Painttown, Snowbird, Wolftown, and Yellow Hill) elects two representatives to the Council. The Principal Chief and Vice-Chief are elected by the Council members.

The Tribal Council is responsible for a number of functional areas and activities. (See organizational chart in Figure 2.) One of these areas is community services, many of which are administered by the Qualla Indian Boundary Projects Community Action Program (CAP). Services provided or administered by CAP include the Headstart Program, the Aging Program (Titles III, VII and X), the Public Transportation System and the Section 147 Demonstration Program.

THE BOYS' CLUB

The Cherokee Boys' Club, Inc., is a non-profit service organization whose importance to the Reservation's residents entitles it to description in some detail.[5] Organized in 1964, its membership is open to any boy currently or formerly a student of Cherokee High School. In 1974 the club had 57 full-time and 11 part-time employees, and voluntarily provides supervision, training and use of equipment to approximately 100 on a part-time basis, for workers paid by the Neighborhood Youth Corp., Operation Mainstream, On-the-job-Training and High School Vocational Training Programs.

The Boys' Club owns and operates three foster homes for Cherokee children, and provides groundskeeping and laundry services to the homes and a number of other Tribal, Governmental and private institutions and clients. It also operates a 52-acre Reservation Recreation Park, including a swimming pool, camping and picnic facilities.

The Boys' Club contracts with the Bureau of Indian Affairs for gravel hauling, road maintenance and roadside mowing. It also operates the lunchroom at the Cherokee schools.

Most important from the viewpoint of this account are the vehicular services provided by the Boys' Club. These include the operation of a trash collection service for the North Carolina portion of the Great Smoky Mountain National Park, and school bus transportation for the Cherokee Indian schools and the Headstart Program. The Boys' Club also provides charter service and transportation for the CAP's Day Care Service, the Civic Center, the Cherokee Historical Association and many of the community's athletic teams.

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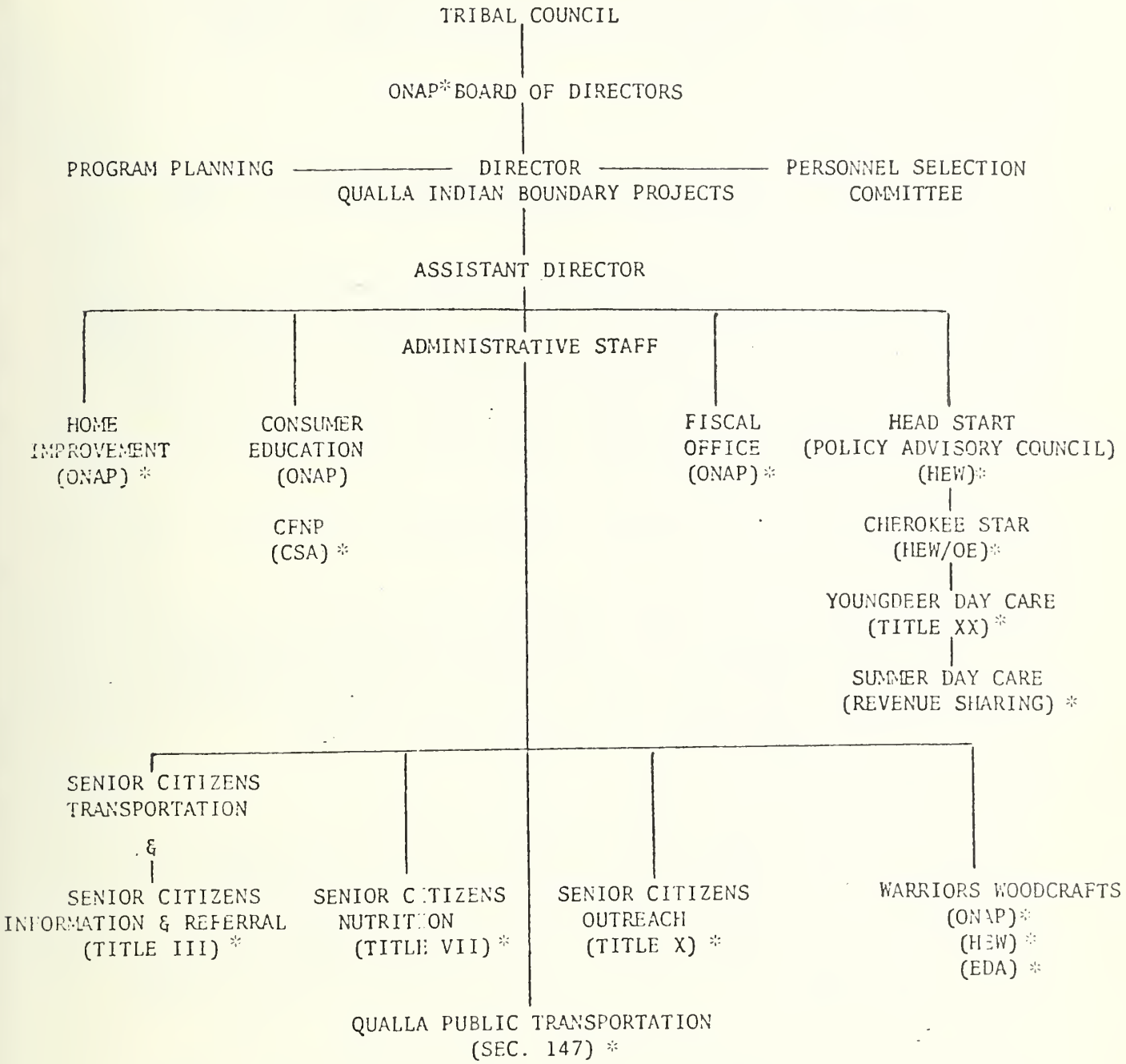
[5] See Comprehensive Plan -- Volume I, pp. 114-118 for a more detailed account.

FIGURE 2

Qualla Indian Organizational Chart



* Federal Sponsoring or funding agency

The Boys' Club garage maintains the Club's 43 vehicles, contracts for service to all GSA vehicles in the area and provides service and maintenance for hundreds of privately owned vehicles, including those of the Qualla Public Transportation System. The garage includes a paint-and-body and front-end shop and is equipped with up-to-date testing and maintenance equipment.

ORIGINS AND PLANNING

The Qualla Public Transportation System began operations in 1970 with two used 33-passenger school buses, a 1949 Chevrolet and a 1963 Dodge, purchased from GSA.

Service was provided on a fixed-route, fixed-schedule basis, serving Big Cove, Big Y and Soco, three of the reservation's six communities, and connecting them with the town of Cherokee. Three daily runs on two routes were scheduled. The morning and evening runs provided residents with transportation to and from work in Cherokee. One of these buses carried near capacity loads in the morning and evening; the other seldom carried more than 13 passengers. Ridership was minimal on both routes during a third (mid-day) run.

Use of the system was offered to elderly residents at no cost. In addition, CAP also operated two vans specifically for the elderly, using Title III funds.

By 1974, the two school buses comprising the Qualla Public Transportation System had deteriorated to the point where fuel and maintenance costs had risen to an unacceptable level, and service reliability had become a problem. Funding was sought for the purchase of new vehicles, better adapted to the gravel roads and mountainous terrain.

THE SECTION 147 PROPOSAL

In October, 1974, the Tribal Council was informed by John Collura of the North Carolina Department of Transportation, of the pending Section 147 Rural Highway Public Transportation Demonstration Program. On December 21, 1974, the Qualla Indian Boundary Projects (QIBP), authorized by the Tribal Council, submitted to the State Division of Engineer's Office of the Federal Highway Administration (FHWA) a preliminary proposal for a Section 147 Public Transportation Demonstration Program for the Qualla Tract.

This proposal was submitted approximately six months before final Section 147 guidelines were published in the Federal Reigster on April 11, 1975. During the following months, there was regular communication with state and federal offices to monitor the progress of the proposal and to amend it in accordance with the published guidelines. One trip was made to Washington, D.C. to discuss the proposal with the FHWA. After the first guidelines were published, QIBP did change the format of its proposal and made other amendments.

The final proposal[6] called for continuation of the existing service, including the free services of the elderly. Replacement of the two buses (now 12 and 26 years old) with three 15-passenger vans was originally proposed, to "increase the services available at a minimal cost increase by using two vans over one route during peak periods, and only one van during slow periods. This would free one van during the midday to offer increased service to areas not contiguous with the Qualla Boundary," e.g. to the towns of Bryson City and Sylva.[7] The vans would also be able to operate over roads which the school buses could not travel. Thus the vans, whose initial cost would be less than that of larger buses, would "permit a minimization of capital expense with maximum versatility in offering transportation to residents of even the most remote areas of the boundary .... Transportation to the neighboring communities of Bryson City and Sylva should in turn offer residents access to the larger shopping, industrial and service facilities of these county seats without difficulties attendant with more expensive private or hired passenger vehicles."[8]

The proposal requested special equipment for the handicapped on only one of the three vans, because, the State Department of Human Resources had one van available for the handicapped and had submitted a proposal for a second van. As stated above, free services to the elderly already offered by the bus system were to be continued under one proposal.

The objectives of the project are summarized next:

1. To provide regularly scheduled and timely public transportation to the residents of the Qualla Indian Boundary between major residential areas and areas of business, manufacturing, and service facilities.

2. To provide regularly scheduled and timely public transportation to the residents of the Qualla Indian Boundary between Cherokee and Bryson City and Cherokee and Sylva.

3. To provide special transportation facilities for the handicapped through the use of a specially equipped van.

4. To provide free transportation services to the senior citizens of the Qualla Boundary

5. To provide the customers of the above services with adequate means for suggesting improvements in the system.

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[6]Qualla Transportation System; Submitted by Eastern Band of Cherokee Indians, Qualla Indian Boundary Projects (June, 1975).

[7]Qualla Transportation System, p. 1: Project Summary, paragraph 3.

6. To provide the above services at nominal individual cost per trip.

7. To encourage public participation as a means of conserving both individual fuel expenditures and individual income.

8. To demonstrate the feasibility of a low cost public transportation system in a sparsely populated rural area.

9. To evaluate the effectiveness of this project in reaching its designated objectives.

The submitted proposal was accompanied by supportive letters of recommendation from industries, businesses, and health and social services agencies in the area and from the Eastern Band of Cherokee Indians.

The EBCI learned in September, 1975, that its proposal had been funded. During the nine months which were to elapse before the new vehicles were delivered, the CAP publicized the proposal in newspapers and on radio and asked for input on the detailed planning of the demonstration program. At the same time, they were careful not to make any statements concerning the starting date or nature of the service to be offered which might raise expectations that could not be met. (Many systems have announced anticipated starting times for services and had to reschedule and reschedule again. This creates frustration and credibility problems.)

During this period the Program Planner of CAP attended a meeting in Atlanta sponsored by the FHWA to review data collection and evaluation guidelines for the Section 147 projects. Many projects felt that too much information was being required. The CAP's representative subsequently submitted forms that would 'simplify' reporting procedures: Some of his ideas were included in a revised draft of the evaluation guidelines.

A public meeting was also held during this period, as required by the FHWA. The meeting was advertised in the newspaper and on radio. It was attended by representatives of the North Carolina State Department of Transportation and of the State Office of the FHWA, a representative from the Tribal Council, the CAP Program Planner and six other persons (a turnout as large as that for public hearings on other programs).

OPERATIONS

When the Tribal Council's Section 147 proposal was granted, the funds were used to purchase three new vehicles. Two began service as replacements in June, 1976. These were Pacemaker buses with Chevrolet frames and engines, and bodies by Superior, assembled by Fred S. Post of Knoxville, Tennessee. One of these has a capacity of 19 passengers, with room for one wheelchair, and is equipped with a wheelchair lift. The second Pacemaker accomodates 26 passengers. Total cost of these two vehicles was approximately $26,700.

A third vehicle, which began service in November, 1976, is a 16-passenger Dodge Maxi-Van equipped with a raised roof and centerfacing seats. It was purchased for $8,560. (These vehicles represent a revision of the original proposal which specified three 15-passenger vans.)

In the initial planning of the demonstration, demand-responsive service was considered but rejected because of the higher cost associated with the additional manpower and dispatching equipment required for such service. Therefore, the original fixed-routes and schedules were retained as the basic service during the Section 147 demonstration.

Routing, schedule and fare information are shown in Tables 1 and 2. Two vehicles provide service between Cherokee and the Big Cove and Big Y-Soco communities. The third vehicle provides service outside the reservation, between Cherokee and the nearby towns of Bryson City, Sylva, and Waynesville. (See Table 3)

The new vehicles are better adapted to road conditions than were the original school buses, and still have sufficient capacity to meet the demands. The two Pacemakers have performed well on both paved and gravel roads. They average about six miles per gallon.

PURPOSE OF TRIPS

The primary purpose of the two-bus, fixed-route and fixed-schedule service is to provide transportation to and from employment in Cherokee. The morning and evening runs are scheduled to provide this service. The midday run provides service to and from Cherokee and from the Qualla Tract to Bryson City and Sylva for shopping, health, social and recreational purposes.

POPULATION SERVED

Most of the riders are working-age residents of the reservation. The younger population is typically in school or Headstart. School transportation is provided on a contractual basis by the Boys' Club. The elderly population is served by two vehicles for the aging, although they may also ride free, within the reservation, on the Qualla Public Transportation System.

Ridership figures for the first six months of operation with the new vehicles (June-November, 1976) are summarized in Tables 4 and 5. On the Big Cove route, average total daily ridership ranged from a low of 28 (September) to a high of 41 (early November), with a daily average of 31 over the period. On the Soco Route, the range was from 9 (early November) to 15 (August), with an average daily ridership of 14 over the period.

Based on an average daily ridership of 45 (both routes) and a total reservation population of about 5,000, the percentage of total population served daily by the Public Transportation System is about one percent. However, if only the population of the three communities directly

TABLE 1

Routing Information

Qualla Public Transportation System

BIG COVE ROUTE:

Leave the Civic Center and travel to White Shield/Boys' Club area, to Qualla Supermarket area, to Council House, to hospital, then up Big Cove Road to Straight Fork. Up to head of Straight Fork and back to Big Cove Road. Continue up Big Cove Road, around Big Cove Loop, and back to Civic Center, White Shield/Boys' Club, Qualla Supermarket area, Council House, and hospital.

Big Cove Scheduled runs: 5:30 a.m.
10:30 a.m.
3:30 p.m.

SOCO ROUTE:

Leave Civic Center, go to White Shield/Boys' Club area, Council House, hospital, up to Soco to Tom Owle's, return to Washington's Creek, return down Soco to hospital, Council House, Qualla Supermarket area, White Shield/Boys Club area, and Civic Center.

Soco Scheduled runs: 6:30 a.m.
11:00 a.m.
4:30 p.m.

COUNTY SEAT ROUTES

Departing Monday, Wednesday and Friday for Sylva

Departing Tuesday and Thursday for Bryson City

Daily departures Monday - Friday

Civic Center	8:30 a.m.	1:30 p.m.
Qualla Market	8:35 a.m.	1:35 p.m.
Council House	8:40 a.m.	1:40 p.m.
Hospital	8:45 a.m.	1:45 p.m.
Qualla 5 & 10	8:50 a.m.	1:50 p.m.
Police Station	8:55 a.m.	1:55 p.m.
Painttown Shopping	9:00 a.m.	2:00 p.m.

TABLE 2

QUALLA PUBLIC TRANSPORTATION

Schedules

BIG COVE

5:50 a.m. goes to Big Cove

6:45 a.m. returns to Cherokee

10:25 a.m. goes up

11:30 a.m. returns

3:30 p.m. goes up (from Qualla Supermarket)

4:45 p.m. returns to Cherokee

SOCO

7:00 a.m. goes up (Soco Trail Campground)

7:45 a.m. returns to Cherokee

4:30 p.m goes up (from Qualla Civic Center)

5:00 p.m. returns

TABLE 3

Qualla Public Transportation System

Fares, Routes and Schedules

SYLVA (Monday and Thursday)	BRYSON CITY (Tuesday and Friday)	WAYNESVILLE (Wednesday)
$1.00 Round trip fare	$1.00 Round trip fare	$1.50 Round trip fare
50¢ Senior Citizens	50¢ Senior Citizens	75¢ Senior Citizens

DEPARTING CHEROKEE	Morning Route	Afternoon Route
Civic Center	9:00 a.m.	12:15 p.m.
Qualla Market Parking Lot	9:05	12:20
Police Station Area	9:10	12:25
Painttown Parking Lot	9:15	12:30

SYLVA:	Arrive Bryson	Depart Sylva	Arrive Sylva	Depart Sylva
Harolds Supermarket Area	10:00 a.m.	11:30 a.m.	1:15 p.m.	2:45 p.m.
Downtown Sylva	10:05	11:25	1:20	2:40
A&P Parking Lot	10:10	11:20	1:25	2:35
Potts Market Parking Lot	10:15	11:15	1:30	2:30

BRYSON CITY:	Arrive Bryson	Depart Bryson	Arrive Bryson	Depart Bryson
A&P Parking Lot	9:45 a.m.	11:15 a.m.	1:00 p.m.	2:45 p.m.
Downtown Bryson City	9:50	11:10	1:05	2:40
IGA Parking Lot	9:55	11:05	1:10	2:35
New Shopping Center	10:00	11:00	1:15	2:30

WAYNESVILLE:	Arrive Waynesville	Depart Waynesville
Downtown Waynesville	10:30 a.m.	2:00 p.m.
Sky City Parking Lot	10:45	1:45

ALL RETURN TRIPS WILL RETURN TO CHEROKEE IN TIME TO RIDE HOME ON THE BIG COVE OR SOCO PUBLIC TRANSPORTATION BUSES!

TABLE 4

QUALLA PUBLIC TRANSPORTATION SYSTEM

BIG COVE ROUTE

Total and Average Daily Ridership (June - November 1976)*

	No of Days	TOTAL FOR MONTH One-Way Fares	Senior Citizens	Infants	Others	TOTAL	DAILY AVERAGE One-Way Fares	TOTAL
JUNE	8	264	6	5	2	277	33	35
JULY	21	674	20	8	2	704	32	33
AUG	22	657	24	10	1	692	30	31
SEPT	21	554	22	4	0	580	26	28
OCT	21	572	21	6	0	599	27	29
NOV	3	117	3	2	0	122	39	41
TOTAL	96	2,838	96	35	5	2,974	30	31

*Based on data from daily ridership summaries. This data has not been verified.

TABLE 5

QUALLA PUBLIC TRANSPORTATION SYSTEM

SOCO ROUTE

Total and Average Daily Ridership (June - November 1976)*

	No. of Days	No. of Fares	Daily Average
JUNE	8	103	13
JULY	21	300	14
AUG	22	338	15
SEPT	21	253	12
OCT	19	251	13
NOV	2	18	9
TOTAL	90	1,263	14

*Based on data from daily ridership summaries. This data has not been verified.

served (Big Cove and Big Y-Soco, combined population approximately 1900) is taken as a base, the percentage of population served is approximately 2.4%.

MANAGEMENT

The management of the Qualla Public Transportation System is the responsibility of the Qualla Indian Boundary Project's Community Action Program (CAP) which directs and coordinates a number of services for the residents of the Qualla Tract. The CAP staff includes the Director, an Assistant Director, a Program Planner, a professional bookkeeper, a bookkeeper-accountant and a secretary. Thus the Public Transportation System shares management personnel with several other agencies.

The Project Director of CAP, Ralph Henry, was involved with the original system and with the planning of the Section 147 project, and manages the present system. Thus there has been complete continuity of management from planning through implementation.

The fixed-route, fixed-schedule system has no dispatcher and, uses full-time drivers, and requires very little day-to-day management. When there is a problem, the Director or Assistant Director of CAP can usually solve it with a phone call.

POLICY AND REGULATORY PROBLEMS

There were no major policy or regulatory problems during the planning or implementation of the Section 147 demonstration. The State Regulatory Commission was informed of the proposal during the planning process.

One recommendation with regulatory implications, made by the Program Planner to the Tribal Council, was the suggestion that special state license plates be used on the vehicles. However, it was decided that the system would continue to use the U.S. government OEO plates.

COORDINATION WITH OTHER TRANSPORTATION SYSTEMS

Besides the Qualla Public Transportation System, the only other source of public transportation on the Qualla Tract is an informal, owner-operated taxi service which has been serving the reservation since 1972. The operator, Mr. Willis Twain, uses the Qualla Supermarket in Cherokee as his base. He provides transportation within the reservation and to and from surrounding towns. When interviewed, Mr. Twain gave no indication that either the past or present Public Transportation System affecting his business.

A number of other owner-operated taxicabs based in communities outside the reservation are listed in the local directory. These offer service between Cherokee and Bryson City, Sylva and Franklin, North Carolina. However there is no formal coordination between these sys-

tems and the Qualla Public Transportation System.

Ridership on the vehicles operated for the aging under Title III funding is at present restricted to the elderly, in accordance with information received by the CAP Director regarding federal regulations governing these vehicles.

The Boys' Club provides transportation for reservation children to and from school and the Headstart Program, but does not offer public transportation service, except for charter and emergency services.

There is the possibility of coordination between the Qualla Public Transportation System and these other systems, to extend service to the general public in areas of the reservation not now served by the Public Transportation System. However, the agency has been told that the Aging vehicles could only be used for elderly and aging services. This prohibits coordination. Also on first appraisal it seems that there could be increased coordination of service with the Boys' Club which provides Headstart and schools with transportation.

The Public Transportation System has attempted other forms of coordination. For example, during the planning stage a proposal was made to coordinate the Qualla Public Transportation System with the Southwest Child Development Center (SWCDC), an organization that serves Cherokee, Clay, Graham, Haywood, Jackson, Macon and Swain Counties. The SWCDC operates about twenty buses that transport children to and from Headstart and day care centers. It was proposed that these buses be used for morning and evening work trips, and provide service to clients of area social service agencies during the midday. The coordination with the Qualla Public Transportation System would have provided the services of two more vehicles to Cherokee, North Carolina, thus augmenting the service provided by the Qualla System.

The proposal was submitted to the U.S. Department of Transportation, but was not funded. There was some opposition to the proposal from the Lead Regional Organization of Region A (the multi-county planning region comprising the seven western counties). However, in the planners' opinion, this opposition was not the deciding factor in rejection of the proposal. In spite of failure to obtain federal funding, some service was provided to social service agencies, but coordination with the Qualla System was not achieved.

COOPERATIVE ARRANGEMENTS WITH BUSINESSES, INDUSTRIES, AND COMMUNITY AGENCIES

Routes and schedules are planned to meet the needs of employees industries, retail businesses and services in Cherokee. Currently there are no special arrangements with businesses or industries such as providing information on the system, or offering discounts to riders, other than the elderly who are entitled to ride free, or for half fare under certain conditions.

MAINTENANCE

Drivers of the Public Transportation System buses complete a daily log sheet. They record data regarding ridership, daily route experience and vehicle inspection (see Figure 3). Maintenance and repair services are provided by the Boys' Club. The club has trained mechanics and extensive mechanical and body repair facilities which it uses to maintain its own fleet of 43 vehicles. If necessary, back-up vehicles are provided by the Boys' Club.

MARKETING

Little effort has been made to attract additional ridership.

During peak hours (morning and evening runs) both vehicles are almost full, and the system would be unable to handle additional demand. However, during the midday run there is excess capacity. Promotional efforts to increase ridership on this run, or efforts to extend service to handicapped persons or clients of social programs could be of benefit.

FUNDING AND FINANCES

When begun in 1970, the Qualla Public Transportation System was funded from local Tribal sources, passenger fares and the Community Action O.E.O. program. Sources and amounts of funding are discussed next.

When the Section 147 proposal was funded local support continued in the form of dollars, shared management, bookkeeping, building space and telephones.

The Section 147 proposal called for a total of $78,944 for the two-year demonstration period. Of this, $32,000 was for capital expenses, and $46,944 for operating expenses. Expected sources of funding included $22,500 from local sources and $8,000 from passenger revenues, with the balance ($48,444) to be funded by the U.S. Department of Transportation.

There is and will continue to be a strong tribal commitment to rural public transportation. The Tribal Council continues to seek ways to increase service to other communities on the reservation. The Qualla Indian Boundary Projects of EBCI has a current annual commitment of $10,000 beyond the Section 147 demonstration period, and funding from the North Carolina Department of Transportation is to be negotiated.

COSTS

During the year prior to the demonstration service was sporadic. The cost per passenger trip is not known. However it is expected that

FIGURE 3: DRIVER'S LOG

DATE __ / __ / __ DRIVER _____

INSPECTION
signals,lights,horn
brakes,heat,defrost
tires,mirror,lift,
doors. circle problem.

ROUTE: SOCO BIG COVE SYLVA BRYSON CITY WAYNESVILLE

SERVICE: FIXED DEMAND MIXED CONTRACT

ROAD: PAVED UNPAVED MIXED

MILEAGE, BEGINNING OF DAY: _ _ _ _ _ . _

MILEAGE, END OF DAY: _ _ _ _ _ . _

GAS EXPENSE: $ _ _ . _ _ GALS._ _._

OIL EXPENSE: $ _ _ . _ _ QTS._ _._

MORNING FARES

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

NOON FARES

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

EVENING FARES

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	61	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

HANDICAPPED FARES

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

MORNING SENIORS

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

NOON SENIORS

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

EVENING SENIORS

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	61	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

INFANTS (DAILY)

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

DESTINATIONS

GROCERY SHOPPING

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

SHOPPING, OTHER

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

MEDICAL/DENTAL

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	91	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

FOOD STAMPS

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	35	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	65	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

SENIOR CENTER

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	45	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

NUTRITION SITE

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78		
81	82	83	84	85	86	87	88		
91	92	93	94	95	96	97	98		

CIVIC CENTER

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	91	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
		73	74	75	76	77	78	79	80
		83	84	85	86	87	88	89	90
		93	94	95	96	97	98	99	100

HOME

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

the cost per passenger trip will be less after the first year of the demonstration. This is partly because management costs are minimal. There is no full-time manager, bookkeeper and no dispatcher which might be necessary with a demand-responsive service. Also the maintenance costs are less with the new vehicles.

CONCLUSION

IMPACT ON THE COMMUNITY

Since the start of the Section 147 Demonstration it has become evident that the image of the Public Transportation System has markedly improved. The increased reliability of the new vehicles has encouraged increased ridership, even without extensive publicity.

The new system clearly has influenced the decisions of new industries that are considering locating in Cherokee. Thus an important impact of the Public Transportation System on the community is increasing the 'attractiveness' of the area to industry, and thus increasing employment opportunities for reservation residents.

The new system, in providing transportation to areas outside the reservation, has offered reservation residents a greater choice of shopping sites and access to lower prices in the surrounding communities. Lastly, the new system has provided the reservation residents better access to health and social service facilities.

The negative impacts of the new system have been minimal or nonexistent. The local taxi operator has not observed any loss of business. The retail businesses in Cherokee likewise have experienced very little if any loss of business, inspite of the increased accessibility of competing businesses in surrounding communities. This may be explained by the fact that retail businesses in Cherokee cater mostly to the tourist trade.

The Principal Chief, John A. Crowe, and the Tribal Council are very much aware that reliable public transportation means more industry, and therefore more employment (especially year-round employment), with a consequent increase in income and improvements in the quality of life for residents of the Cherokee reservation. Consequently they and the Tribe actively support the system.

QUALLA PUBLIC TRANSPORTATION SYSTEM

RURAL PUBLIC HIGHWAY TRANSPORTATION DEMONSTRATION PROGRAM
DATA INTAKE FORM 01
BASELINE PROJECT OBJECTIVES AND TARGET POPULATION

01 (1-2)

Project Number: 001 (3-5)

Date: 1/1/76 (6-9)

CARD NO. 011

1. Project Name: QUALLA RURAL PUBLIC TRANSPORTATION (13-48)

2. Sponsor Organization: QUALLA INDIAN BOUNDARY PROJECTS (13-48)

CARD NO. 012

2a. Type of organization sponsoring the S.147 project (CIRCLE ALL THAT APPLY)

- State Department of Transportation 13-1
- Other State governmental agency 14-1
- County government 15-1
- City or other local government 16-1
- Regional planning district of council of governments 17-1
- Transportation authority 18-1
- Community Action Agency 19-1
- Indian Tribe 20-1
- Other (SPECIFY)
  OFFICE OF NATIVE AMERICAN PROGRAMS . . . 21-1

CARD NO. 013

3. Project Objectives (Narrative):

Provide low cost public transportation connecting the seven Cherokee communities with shopping, industrial, and service areas of both the Qualla Boundary and the neighboring communities of Bryson City and Sylva, N.C.

- Establish new service 22-1
- Coordinate existing services 23-1
- Expand existing services 24-1
- Establish regional transit authority . . . 25-1
- Organize volunteer services 26-1
- Plan 27-1
- _____ . . . 28-1
- Other 29-1

RURAL PUBLIC HIGHWAY TRANSPORTATION DEMONSTRATION PROGRAM

DATA INTAKE FORM 03

BASELINE AREA TRANSPORTATION SERVICE AVAILABILITY *

03

Project Title: Oualla Rural Public Transportation Project Number: 001

Date: 1/1/76

Types of Service (1)	AVERAGE MONTHLY OPERATING CHARACTERISTICS							
	Number (2)	Vehicle Miles (3)	Seat Miles (4)	One-Way Route Mileage (5)	One-Way Passenger Trips (6)	No. of Vehicles (7)	Fares Per Passenger Mile (8)	
1. Intercity Bus Service	01							
2. Buses only inside towns	02							
3. Taxis	03							
4. Social Service Agencies	04							
5. Others	05							

List of companies summarized above

Name (9)	Type (10)	Service (11)	Location (12)

* As of this date the only transportation system operating on the boundary other than the QPT project is a 'taxi' operating unadvertised out of a man's home and at times out of the local grocery store.

RURAL PUBLIC HIGHWAY TRANSPORTATION DEMONSTRATION PROGRAM
DATA INTAKE FORM 01 (continued)

01 (1 2)

Project Number: 041 (3 4 5)

Date: 1 1 / 7 6 (6 7 8 9)

0 4 (10 11 12)

4. Operating Environment (Narrative):

Rural mountainous area with approx 15% of the roads paved.

(a) Terrain: Flat 13-1
Hilly . . . . . -2
Mountains . . . . . (-3)

(b) Temperature (°F)
Avg. High 80 (14 15) Avg. Low 40 (16 17)

(c) % of total vehicle mileage on unpaved roads 10 (18 19)

(d) days per year of extremely adverse weather conditions 10 (20 21)
RAIN
SNOW
FREEZING ICE

5. Area served: Total population in project area: (22) 5341 (29)

Area served in square miles: (30) 81 (34)

Service provided state-wide? Yes 35-1
No . . . . . (-2)

Number of counties served: 003 (36 37 38)

List of counties served (by name)

JACKSON

SWAIN

GRAHAM

6. Does this project provide transportation to persons or goods (through direct operations, contracts, payments or other methods?) (IF NO, THE REMAINING QUESTIONS ON THIS FORM DO NOT APPLY)
Yes . . . . . (39 -1)
No . . . . . -2

7. Can any member of the general public in the service area use this service?
Yes . . . . . (40 -1)
No . . . . . -2

RURAL PUBLIC HIGHWAY TRANSPORTATION DEMONSTRATION PROGRAM
DATA INTAKE FORM 01 (continued)

01 (1 2)

Project Number: 0 0 1 (3 4 5)

Date: 1 1 / 7 6 (6 7 8 9)

8. What is the Unduplicated Number of Persons with Restricted Mobility in the Service Area?

015 (10 11 12)

3 0 0 (13 14 15) (≈ 5%)

9. What is the Unduplicated Number of Persons Expected to Use the System Each Month? (see instructions)

1 5 0 (22 23 24) (≈ 5%)

10. Is special attention given in the system's design or operations to the needs of any particular target group? Yes . . . (1) No . . . (2)

(IF YES, FILL IN THE FOLLOWING DATA FOR EACH GROUP)

Special Target Population Groups	Persons in Area Served by Project	Number of P... Expected Use the Sy... Each Mon...	...s
10.1 Elderly	3 4 1 (27–32)	(33–38)	7
10.2 Poor	3 0 0 0 (39–44)	(45–50)	0
10.3 Minorities			
Black	(51–56)	(57–62)	
Oriental	(63–68)	(69–74)	
American Indian	3 0 0 0 (13–18)	1 5 (19–24)	0
Spanish	(25–30)	(31–36)	
Other	(37–41)	(42–47)	
10.4 Handicapped	(48–53)	(54–59)	
10.5 Social Service Agency Clients	(60–65)	(66–71)	
10.6 Commuters & Workers	3 0 0 0 (13–18)	1 5 (19–24)	0
10.7 Youth	(25–30)	(31–36)	
10.8 Others (SPECIFY) _____	(37–42)	(43–48)	

RURAL PUBLIC HIGHWAY TRANSPORTATION DEMONSTRATION PROGRAM
DATA INTAKE FORM 02 (continued)
PLANNED PROJECT CHARACTERISTICS

0 2

Project Number: 0 0 1

Date: 1/1/76

12. Fleet Characteristics:

0 8 (10 11 12) 12a. Do you operate or plan to operate your own Transportation Service? Yes . . . . . (33-1) No . . . . . -2

12b. Provide the following information on all project vehicles (whether owned, leased, contracted, etc.)

VEHICLE FLEET CHARACTERISTICS

Vehicle Type (c)	Make & Model (d)	Special Features (e)	CODING BLOCK (DO NOT USE)	Quantity (f)	Year (g)	Number of Seats (h)
Auto			14 15 17 18 20		21 22	23 24
			25 26 28 29 31		32 33	34 35
			36 37 39 40 42		43 44	45 46
Station Wagon (5-9 seats)			47 48 50 51 53		54 55	56 57
			58 59 61 62 64		65 66	67 68
			69 70 72 73 75		76 77	78 79
0 9 (10 11 12)			14 15 17 18 20		21 22	23 24
Van/Mini Bus (10-16 seats)			25 26 28 29 31		32 33	34 35
Maxi-van	Dodge 1976	A/C Raised roof, six seats		1	76	16
			36 37 39 40 42		43 44	45 46
			47 48 50 51 53		54 55	56 57
Small Bus	Chev. Bus 1976	Lift/rear heater	58 59 61 62 64	1	65 66 76	67 68 19
(17-33 seats)	Chev Bus 1976	rear heat		1	76	26
			69 70 72 73 75		76 77	78 79
School Bus (less than 31 seats)						
1 0 (10 11 12)			14 15 17 18 20		21 22	23 24
(31 seats and above)						
			25 26 28 29 31		32 33	34 35
Transit Bus						
			36 37 39 40 42		43 44	45 46
(34 seats and above)						
			47 48 50 51 53		54 55	56 57
Other (SPECIFY)						
			58 59 61 62 64		65 66	67 68
			69 70 72 73 75		76 77	78 79
1 1 1 (10 11 12)			14 15 17 18 20		21 22	23 24

RURAL PUBLIC HIGHWAY TRANSPORTATION DEMONSTRATION PROGRAM
DATA INTAKE FORM 02 (continued)
PLANNED PROJECT CHARACTERISTICS

02

Project Number: 041

Date: 1/7/76 UPDATE

9. Fares: Is this transportation service provided for free to all passengers? Yes. . (1)
No . . (2)

10. If no, please fill in the following information on one-way passenger fares:

ROUTE 5
SYLVA

One-Way Passenger Fares Charged	FLAT FARES: Dollars Per One-Way Passenger Trip $XX.XX	FLAT FARES: Average Cents Per Mile	GRADUATED FARES: Base Fare $XX.XX	GRADUATED FARES: Increment Per Mile (¢)	GRADUATED FARES: Average Fares Per Passenger Mile (¢)	Total Monthly Charges (If Applicable) $XX.XX
10.1 Regular Cash Fares with no Discount	1.00	02				27.0
10.2 Special Cash Fares with Discount						
Shoppers						
0|3| Students						
Elderly	.50	01				9.0
Others (SPECIFY)						
0|4| _____						
_____						
10.3 Subscription Service/ Purchased Passes						
0|5| 10.4 Cooperative Service						
10.5 Donations						

10.6 Total projected monthly income from fares = average fare times number of passengers = $ 36¢

11. Contracts, Grants, and Contributions from All Agencies

Names of Agencies and others providing contracts, grants and contributions (a)	Agency Code	Expected Monthly Contract Contribution/ Revenues $XX,XXX (b)	REVENUES CONTRACTED: Per Vehicle Mile $X.XX (c)	Per Passenger $XX.XX (d)	Per Passenger Mile $X.XX (e)	Per Delivery $X.XX (f)
0|6|						
0|7|						
Total of other remaining agencies						

* Fare collected for round trip only

RURAL PUBLIC HIGHWAY TRANSPORTATION DEMONSTRATION PROGRAM
DATA INTAKE FORM 02 (continued)
PLANNED PROJECT CHARACTERISTICS

02

Project Number: 01

Date: 12/76 UPDATE

D 2 — 9. Fares: Is this transportation service provided for free to all passengers? Yes. . -1
No . . -2

10. If no, please fill in the following information on one-way passenger fares:

ROUTE 2
WAYNESVILLE

One-Way Passenger Fares Charged	FLAT FARES: Dollars Per One-Way Passenger Trip $XX.XX	FLAT FARES: Average Cents Per Mile	GRADUATED FARES: Base Fare $XX.XX	GRADUATED FARES: Increment Per Mile (¢)	GRADUATED FARES: Average Fares Per Passenger Mile (¢)	Total Monthly Charges (If Applicable) $XX.XX
10.1 Regular Cash Fares with no Discount	1.50	03				18
10.2 Special Cash Fares with Discount						
Shoppers						
0 3 — Students						
Elderly	1.50	02				6
Others (SPECIFY)						
0 4 — _____						
_____						
10.3 Subscription Service/ Purchased Passes						
0 5 — 10.4 Cooperative Service						
10.5 Donations						

10.6 Total projected monthly income from fares = average fare times number of passengers = $ 24.

11. Contracts, Grants, and Contributions from All Agencies

Names of Agencies and others providing contracts, grants and contributions (a)	Agency Code	Expected Monthly Contract Contribution/ Revenues $XX,XXX (b)	REVENUES CONTRACTED: Per Vehicle Mile $X.XX (c)	Per Passenger $XX.XX (d)	Per Passenger Mile $X.XX (e)	Per Delivery $X.XX (f)
0 6						
0 7 — Total of other remaining agencies						

* Fare collected for round trip only

RURAL PUBLIC HIGHWAY TRANSPORTATION DEMONSTRATION PROGRAM
DATA INTAKE FORM 02 (continued)
PLANNED PROJECT CHARACTERISTICS

02 (1 2)

Project Number: 006 (3 4 5)

Date: 11/76 (6 7 8 9)

0 2 (10 11 12) 9. Fares: Is this transportation service provided for free to all passengers? Yes. .11-1
No . . (-2)

10. If no, please fill in the following information on one-way passenger fares:

ROUTE: SYLVA

One-Way Passenger Fares Charged	FLAT FARES: Dollars* Per One-Way Passenger Trip $XX.XX	FLAT FARES: Average Cents Per Mile	GRADUATED FARES: Base Fare $XX.XX	GRADUATED FARES: Increment Per Mile (¢)	GRADUATED FARES: Average Fares Per Passenger Mile (¢)	Total Monthly Charges (If Applicable) $XX.XX
10.1 Regular Cash Fares with no Discount (14–31)	1.00	.02				3.9
10.2 Special Cash Fares with Discount (32–49)						
Shoppers (50–67)						
03 Students (10 11 12) (14–31)						
Elderly (2–49)	.50	.01				1.3
Others (SPECIFY) (50–68)						
04 (10 11 12) (14–31)						
(32–49)						
10.3 Subscription Service/ Purchased Passes (50–67)						
05 (10 11 12) 10.4 Cooperative Service (14–31)						
10.5 Donations (32–49)						

NOTE DECIMAL

10/76

10.6 Total projected monthly income from fares = average fare times number of passengers = $ ___ ___ ___ 52. (51 52 53 54 55)

11. Contracts, Grants, and Contributions from All Agencies

Names of Agencies and others providing contracts, grants and contributions (a)	Agency Code	Expected Monthly Contract Contribution/ Revenues $XX,XXX (b)	REVENUES CONTRACTED: Per Vehicle Mile $X.XX (c)	Per Passenger $XX.XX (d)	Per Passenger Mile $X.XX (e)	Per Delivery $X.XX (f)
(56–61)	56 57	61	62 64	65 68	69 71	72 74
06 (10 11 12) (13–18)	13 14	18	19 21	22 25	26 28	29 31
(32–37)	32 33	37	38 40	41 44	45 47	48 50
(51–56)	51 52	56	57 59	60 63	64 66	67 69
07 (10 11 12) Total of other remaining agencies (13–18)	13 14	18	19 21	22 25	26 28	29 31

re collected for round trip only

RURAL PUBLIC HIGHWAY TRANSPORTATION DEMONSTRATION PROGRAM
DATA INTAKE FORM 02 (continued)
PLANNED PROJECT CHARACTERISTICS

0 2 (1 2)

Project Number: 0 0 1 (3 4 5)

Date: 1 1 7 6 (6 7 8 9)

0 2 (10 11 12) 9. Fares: Is this transportation service provided for free to all passengers? Yes. 13-1 No. -2

10. If no, please fill in the following information on one-way passenger fares:

ROUTE 3 BRYSON CITY

One-Way Passenger Fares Charged	FLAT FARES: Dollars Per One-Way Passenger Trip $XX.XX *	FLAT FARES: Average Cents Per Mile	GRADUATED FARES: Base Fare $XX.XX	GRADUATED FARES: Increment Per Mile (¢)	GRADUATED FARES: Average Fares Per Passenger Mile (¢)	Total Monthly Charges (If Applicable) $XX.XX
10.1 Regular Cash Fares with no Discount	1.00 (14-17)	3 (18-19)	(20-23)	(24-25)	(26-27)	2.7 (28-31)
10.2 Special Cash Fares with Discount	(32-35)	(36-37)	(38-41)	(42-43)	(44-45)	(46-49)
Shoppers	(50-53)	(54-55)	(56-59)	(60-61)	(62-63)	(64-67)
0 3 (10 11 12) Students	(14-17)	(18-19)	(20-23)	(24-25)	(26-27)	(28-31)
Elderly	.50 (32-35)	1 (36-37)	(38-41)	(42-43)	(44-45)	.9 (46-49)
Others (SPECIFY)	(50-53)	(54-55)	(56-59)	(60-61)	(62-63)	(64-67)
0 4 (10 11 12) _____	(14-17)	(18-19)	(20-23)	(24-25)	(26-27)	(28-31)
_____	(32-35)	(36-37)	(38-41)	(42-43)	(44-45)	(46-49)
10.3 Subscription Service/ Purchased Passes	(50-53)	(54-55)	(56-59)	(60-61)	(62-63)	(64-67)
0 5 (10 11 12) 10.4 Cooperative Service	(14-17)	(18-19)	(20-23)	(24-25)	(26-27)	(28-31)
10.5 Donations	(32-35)	(36-37)	(38-41)	(42-43)	(44-45)	(46-49)

NOTE DECIMAL

NOTE DECIMAL

10.6 Total projected monthly income from fares = average fare times number of passengers = $ 3 6 (51 52 53 54 55)

11. Contracts, Grants, and Contributions from All Agencies

Names of Agencies and others providing contracts, grants and contributions (a)	Agency Code	Expected Monthly Contract Contribution/ Revenues $XX,XXX (b)	REVENUES CONTRACTED: Per Vehicle Mile $X.XX (c)	Per Passenger $XX.XX (d)	Per Passenger Mile $X.XX (e)	Per Delivery $X.XX (f)
	(56-57)	(58-61)	(62-64)	(65-68)	(69-71)	(72-74)
0 6 (10 11 12)	(13-14)	(15-18)	(19-21)	(22-25)	(26-28)	(29-31)
	(32-33)	(34-37)	(38-40)	(41-44)	(45-47)	(48-50)
	(51-52)	(53-56)	(57-59)	(60-63)	(64-66)	(67-69)
0 7 (10 11 12) Total of other remaining agencies	(13-14)	(15-18)	(19-21)	(22-25)	(26-28)	(29-31)

* Fare collected for round trip only

RURAL PUBLIC HIGHWAY TRANSPORTATION DEMONSTRATION PROGRAM
DATA INTAKE FORM 02 (continued)
PLANNED PROJECT CHARACTERISTICS

02

Project Number: 000

Date: 1/1/76

9. Fares: Is this transportation service provided for free to all passengers? Yes. .13-1
No . . (-2)

10. If no, please fill in the following information on one-way passenger fares:

ROUTE: SOCO

One-Way Passenger Fares Charged	FLAT FARES: Dollars Per One-Way Passenger Trip $XX.XX	FLAT FARES: Average Cents Per Mile	GRADUATED FARES: Base Fare $XX.XX	GRADUATED FARES: Increment Per Mile (¢)	GRADUATED FARES: Average Fares Per Passenger Mile (¢)	Total Monthly Charges (If Applicable) $XX.XX
10.1 Regular Cash Fares with no Discount	2.5	1				.55
10.2 Special Cash Fares with Discount						
Shoppers						
03 Students						
Elderly	.0	.0				
Others (SPECIFY)						
04 _____						
_____						
10.3 Subscription Service/ Purchased Passes						
05 10.4 Cooperative Service						
10.5 Donations						

NOTE DECIMAL

10.6 Total projected monthly income from fares = average fare times number of passengers = $ .55

11. Contracts, Grants, and Contributions from All Agencies

Names of Agencies and others providing contracts, grants and contributions (a)	Agency Code	Expected Monthly Contract Contribution/ Revenues $XX,XXX (b)	REVENUES CONTRACTED: Per Vehicle Mile $X.XX (c)	Per Passenger $XX.XX (d)	Per Passenger Mile $X.XX (e)	Per Delivery $X.XX (f)
06						
07						
Total of other remaining agencies						

RURAL PUBLIC HIGHWAY TRANSPORTATION DEMONSTRATION PROGRAM
DATA INTAKE FORM 02 (continued)
PLANNED PROJECT CHARACTERISTICS

0 2 (1 2)

Project Number: 0 0 1 (3 4 5)

Date: 1 1 7 6 (6 7 8 9)

0 2 (10 11 12) 9. Fares: Is this transportation service provided for free to all passengers? Yes. -1 (13-1)
No. -2

10. If no, please fill in the following information on one-way passenger fares:

ROUTE 2 BIG COVE

One-Way Passenger Fares Charged	FLAT FARES: Dollars Per One-Way Passenger Trip $XX.XX	FLAT FARES: Average Cents Per Mile	GRADUATED FARES: Base Fare $XX.XX	GRADUATED FARES: Increment Per Mile (¢)	GRADUATED FARES: Average Fares Per Passenger Mile (¢)	Total Monthly Charges (If Applicable) $XX.XX
10.1 Regular Cash Fares with no Discount		25 ∅2				1 3 8.
10.2 Special Cash Fares with Discount						
Shoppers						
0 3 (10 11 12) Students						
Elderly		∅ ∅				∅
Others (SPECIFY)						
0 4 (10 11 12) _____						
_____						
10.3 Subscription Service/ Purchased Passes						
0 5 (10 11 12) 10.4 Cooperative Service						
10.5 Donations						

PLEASE NOTE DECIMAL

10.6 Total projected monthly income from fares = average fare times number of passengers = $ 1 38. (51 52 53 54 55)

11. Contracts, Grants, and Contributions from All Agencies

N.A.

Names of Agencies and others providing contracts, grants and contributions (a)	Agency Code	Expected Monthly Contract Contribution/ Revenues $XX,XXX (b)	REVENUES CONTRACTED: Per Vehicle Mile $X.XX (c)	Per Passenger $XX.XX (d)	Per Passenger Mile $X.XX (e)	Per Delivery $X.XX (f)
0 6 (10 11 12)						
0 7 (10 11 12)						
Total of other remaining agencies						

RURAL PUBLIC HIGHWAY TRANSPORTATION DEMONSTRATION PROGRAM

DATA INTAKE FORM 02

PLANNED PROJECT CHARACTERISTICS

[0][2] (1 2)

Project Title Ouachita Rural Public Transportation Project Number: [0][0][1] (3 4 5)

Date: [1][1]/[7][6] (6 7 8 9)

SERVICE

[0][1] (10 11 12)

1. Route Characteristics for the entire system: (CHECK all that apply)

Fixed Routes and Schedules, no deviations	[✓] (13-1)
Fixed Route with deviations (not more than 1/2 mile from route)	[ ] (14-1)
Fixed Schedules between points (no particular route)	[ ] (15-1)
Demand Responsive (no fixed routes or schedules)	[ ] (16-1)

*2. Total One-Way Route Mileage Each Month: SEC. 17.5 × 9; SYL 24 × 13; BIG COVE 40.5 × 22; SOLO 36 × 22; QPT USE = [2][1][9][7] (17 18 19 20)

*3. Overall Monthly Frequency of Service: (Frequency = Monthly Vehicle Miles ÷ One-Way Route Miles) = [2][2] (21 22 23 24) times per month

**4. Reservation Time in Advance: days [ ] (25) or hours [ ][ ] (26 27) NA

5. Planned Monthly Vehicle Miles. (Total System) [4][3][9][4] (28 29 30 31 32 33)

6. Planned Monthly Seat Miles. (Total System) [9][3][1][2][4] (34 35 36 37 38 39 40 41)

7. Planned One-Way Monthly Passengers. (Total System) [1][1][0][0] (42 43 44 45 46 47)

SEC. & SYL 5; BIG COVE 30; SOLO 15; QPT USE 10/5 — REG SENIOR 3/2, ES/5

STAFF

8. Characteristics of Drivers:

Types of Drivers	Number of Drivers: Full Time	Part Time	Total
Volunteers	(48 49 50)	(51 52 53)	(54 55 56)
Salaried, Paid, and Contracted	3 (57 58 59)	(60 61 62)	3 (63 64 65)
Total	3 (66 67 68)	(69 70 71)	3 (72 73 74)

*Fixed route systems (or portions of systems) only
**Demand responsive systems (or portions of systems) only

CASE STUDY

APPALACHIAN OHIO REGIONAL TRANSIT ASSOCIATION (AORTA)

INTRODUCTION

The Appalachian Ohio Regional Transit Association (AORTA) is a public transportation system currently serving Athens, Hocking, Vinton, and Perry counties, and the City of Athens in southeastern Ohio. In the near future (June, 1977) expansion of service into Gallia, Jackson, and Meigs counties is planned.

AORTA's purpose is to coordinate existing specialized transportation services, to extend them to the public where possible and provide new service where none exists.

BACKGROUND AND SETTING[1]

The region known as Appalachian Ohio comprises twenty-eight counties in the southeastern part of the state (See Fig. 1). These counties cover 13,735 square miles, 33.5% of the area of the state. Population density, however, is less than one-fourth that of the non-Appalachian counties. The region's population in 1972 was estimated at 1,161,800, 10.77% of the state total. Population density was 84.5 persons per square mile, versus Ohio's average 263 PPSM and the non-Appalachian counties average of 353 PPSM.

The region is characterized by small urban areas, isolated from each other, each serving a surrounding area of small towns, villages and rural areas. No single metropolitan area dominates the region.

The region's economy is diversified. Coal, timbering and clay products are major industries and by their nature are disperse activities. Other major areas of employment, as well as education and services, also tend to be disperse and located in the region's urban centers.

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[1] Materials for this section were taken largely from AORTA's Proposal for Rural Highway Public Transportation Demonstration (Section 147) Project, June 6, 1975; pp. 36 ff. Sources of statistics are the 1970 Census of Population and the Appalachian Regional Commission.

Figure 1

APPALACHIAN REGION OF OHIO

Several metropolitan centers outside of the Appalachian region - Columbus, Cincinnati, Ashland (Kentucky), Huntington (West Virginia), Parkersburg (West Virginia), Pittsburgh - exert influence on the region. However, this influence is limited by access to transportation and highways. Highway development in the region is not yet complete. With the exception of I-77 in the eastern part of the region, four-lane limited-access highways do not completely traverse the region in either north-south or east-west directions. Bus, rail and air transport between the major metropolitan centers and the region are limited due to the very scattered population.

Service Area Characteristics

The AORTA service area comprises seven counties - Perry, Hocking, Athens, Vinton, Meigs, Jackson, and Gallia - located in the center of the Appalachian Ohio region (See Fig. 2). The 1970 population of the area was 184,275, of which 116,938, or 63%, was rural (See Table 1). The area covers 3,069 square miles, and the 1970 rural population density was 38.1 persons per square mile.

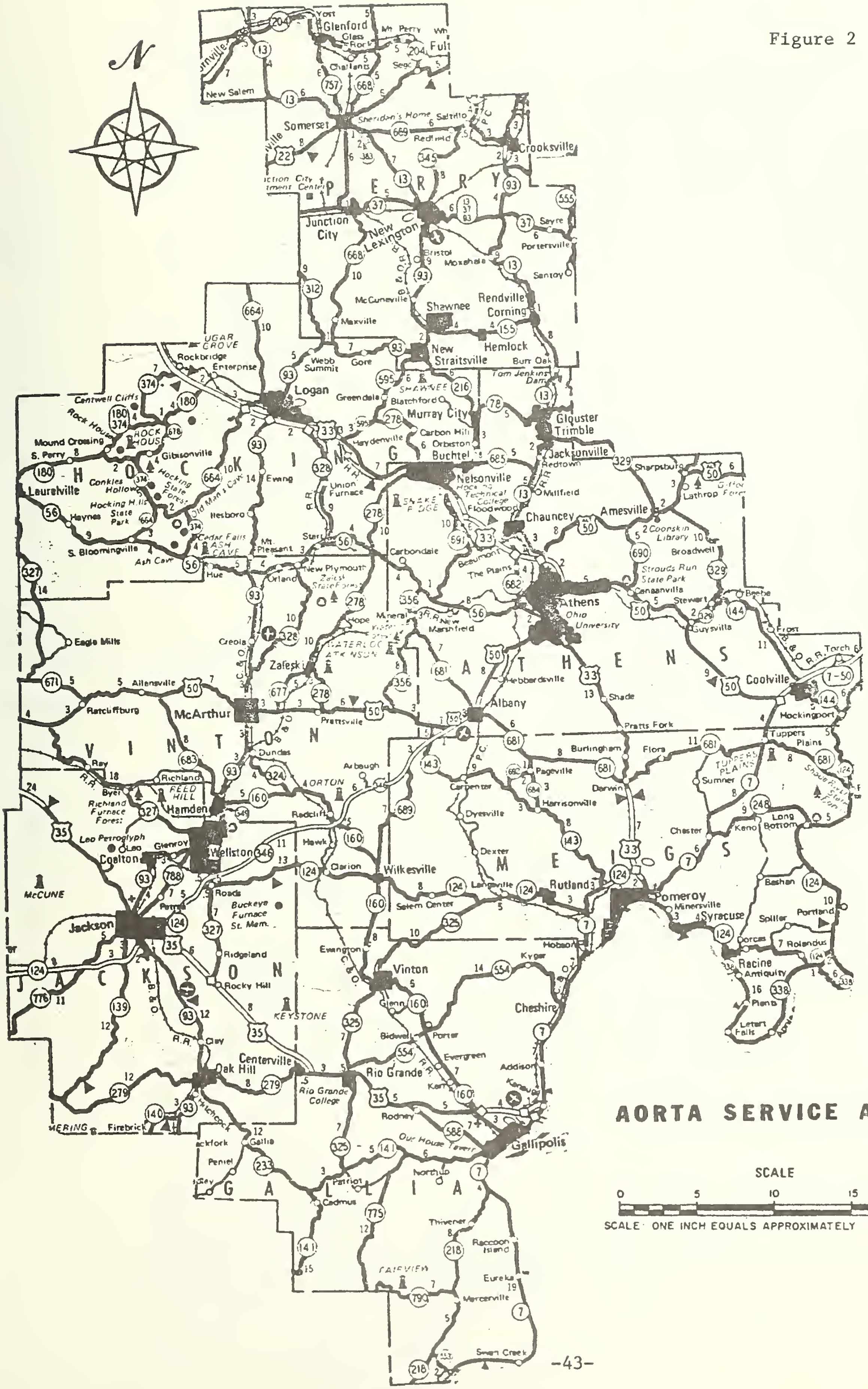
Cities and towns with over 2,500 population (1970 Census) in the seven county area are listed in Table 2.

Poverty is prevalent in the AORTA service area. Over forty percent of the households in the area have annual incomes of less than $6,000, and 72.7% have incomes of less than $10,000 (See Table 3). An indicator of the degree of poverty, and corresponding isolation, of area residents is the fact that over 17% of the households in the area do not have access to an automobile, and over 28% do not have a telephone (See Tables 4-6).

Characteristic of the area is a high rate of commuting out of the county of residence to work. Overall, 21.3% of the labor force commutes to work in another county. The rate is highest (41.7%) for Perry County residents, followed by residents of Meigs County (36.5%) and Vinton County (33.4%) (See Tables 7-8). By far the predominant mode of transportation to work is the private automobile (See Table 9). In a time of increasing scarcity of fuel, and rising costs of fuel, vehicle ownership and operation, a low cost mass transit system for commuters becomes a growing requirement for keeping employment.

The elderly, the handicapped, and children comprise other groups for whom low cost mass transportation is necessary for access to health and social services, employment, and recreational and social activities. For some of the elderly, whose health frequently makes it unwise or impossible fo them to drive, the only options often are to pay large amounts of their fixed incomes for private transportation, or go without needed services to which they are entitled. The handicapped,

Figure 2



AORTA SERVICE AREA

SCALE

0 5 10 15 20

SCALE: ONE INCH EQUALS APPROXIMATELY 8 3/4 MILES

TABLE I

RURAL - URBAN POPULATION DISTRIBUTION

County	Total Pop.	Rural Area Pop.	% Rural Pop.	Total Housing Units	Pers/ Housing Units	Rural Housing Units	% Rural Units
Athens	54,887	26,767	48.8	16,546	3.32	9,376	56.7
Hocking	20,322	14,053	69.2	7,518	2.70	5,154	68.6
Perry	27,434	19,685	71.8	9,400	2.92	6,730	71.6
Meigs	19,799	14,343	72.4	7,329	2.70	5,154	70.3
Gallia	25,239	17,749	70.3	8,226	3.07	5,991	72.8
Jackson	27,174	14,921	54.9	9,571	2.84	5,106	53.3
Vinton	9,420	9,420	100.0	3,440	2.74	3,440	100.0
TOTAL	184,275	116,938	63.46	62,030	2.97	40,951	66.02

Source: U. S. Bureau of the Census 1970 and the Appalachian Regional Commission (ARC)

TABLE 2

City	County	Population of City
Athens	Athens	23,310*
Gallipolis	Gallia	7,490
Jackson	Jackson	6,843
Logan	Hocking	6,269
Wellston	Jackson	5,410
New Lexington	Perry	4,921
Nelsonville	Athens	4,812
Middleport	Meigs	2,784
Pomeroy	Meigs	2,672

*To this may be added approximately 13,000 Ohio University students who are not permanent Athens residents

TABLE 3

FAMILIES BY INCOME LEVEL

County	Under $1,000	1,000-1,999	2,000-2,999	3,000-3,999	4,000-4,999	5,000-5,999	6,000-6,999	7,000-7,999	8,000-8,999	9,000-9,999	10,000-11,999	12,000-14,999	Over 15,000	Total
Athens	255	577	717	804	846	893	935	1,050	940	764	1,204	1,089	1,299	11,373
Hocking	133	318	279	312	311	445	472	498	421	409	728	459	494	5,279
Perry	170	411	576	451	435	587	588	611	634	502	810	603	428	6,806
Meigs	217	520	435	528	348	390	466	472	419	428	518	364	223	5,328
Gallia	208	462	544	519	350	492	505	469	445	448	538	544	550	6,074
Jackson	273	540	593	533	558	607	643	658	521	378	739	459	522	7,024
Vinton	111	176	227	200	177	215	277	180	174	126	241	120	173	2,397
TOTAL	1,367	3,004	3,371	3,347	3,025	3,629	3,886	3,938	3,554	3,055	4,778	3,638	3,689	44,281
	3,08%	6.78%	7.62%	7.56%	6.83%	8.19%	8.78%	8.89%	8.03%	6.90%	10.79%	8.22%	8.33%	

Source: U. S. Bureau of the Census 1970

TABLE 4

NUMBER OF HOUSEHOLDS WITH AUTOMOBILES AVAILABLE

County	None	One Auto	Two Autos	Three Or More Autos	% No Auto	People W/O Access To Auto	Average Person Per Hshld	% Co. Pop. No Access	Total* Hshlds
Athens	2,389	8,371	3,745	728	15.68	7,931	3.32	14.44	16,546
Hocking	1,034	3,592	1,588	317	15.83	2,791	2.70	13.73	7,518
Perry	1,275	4,350	2,383	455	15.07	3,723	2.92	13.57	9,400
Meigs	1,125	3,232	1,797	311	17.40	3,037	2.70	15.34	7,329
Gallia	1,385	3,844	1,911	267	18.70	4,252	3.07	16.85	8,226
Jackson	1,766	4,636	1,958	291	20.41	5,015	2.84	18.46	9,571
Vinton	516	1,650	576	167	17.73	1,414	2.74	15.01	3,440
TOTAL	9,490	26,675	13,958	2,536	17.05	28,163	2.97		62,030
%	17.05	53.32	25.07	4.56				15.28	

* Does not include unoccupied housing units

Source: U. S. Bureau of the Census 1970 and the Appalachian Regional Commission (ARC)

TABLE 5

TRANSIT DEPENDENT INDICATOR BY AUTOMOBILE AVAILABILITY

County	Average Pers/ Family	Families No Auto	X Persons Per Hshld	90% of No Auto	Hshld. One Auto	X Persons Per Hshld	30% of One Auto	Total Est. Transit Dependent	% of Total Transit Dependent
Athens	3.32	2,389	7,931	7,138	8,371	27,792	8,338	15,476	28.19
Hocking	2.70	1,034	2,792	2,513	3,592	9,698	2,910	5,423	26.68
Perry	2.92	1,275	3,723	3,351	4,350	12,702	3,811	7,162	26.10
Meigs	2.70	1,125	3,038	2,734	3,232	8,726	2,618	5,352	27.03
Gallia	3.07	1,385	4,252	3,827	3,844	11,801	3,540	7,367	29.18
Jackson	2.64	1,766	5,015	4,514	4,636	13,166	3,950	8,464	31.14
Vinton	2.74	516	1,414	1,272	1,650	4,521	1,356	2,628	27.89
TOTAL	2.97	9,490	28,165	25,349	29,675	88,406	26,523	51,872	28.14

Source: U. S. Bureau of the Census 1970 and the Appalachian Regional Commission (ARC)

TABLE 6

TRANSIT AND COMMUNICATIONS INDICATOR BY TELEPHONE AVAILABILITY

County	Average Persons Per Hshld	Total Housing Units	% Units No Phone	Units No Phone	X Persons Per Hshld	80% of No Phone Population	% of Total Need
Athens	3.32	16,546	24.0	3,970	13,180	10,544	25.53
Hocking	2.70	7,518	32.0	2,406	6,496	5,197	12.59
Perry	2.92	9,400	24.2	2,275	6,643	5,314	12.87
Meigs	2.70	7,329	31.8	2,331	6,294	5,035	12.19
Gallia	3.07	8,226	23.8	1,958	6,011	4,809	11.65
Jackson	2.84	9,571	33.4	3,197	9,079	7,263	17.58
Vinton	2.74	3,440	41.5	1,428	3,912	3,130	7.59
TOTAL	2.97	62,030	28.31	17,565	51,615	41,311	100.00

Source: U. U. Bureau of the Census 1970 and Appalachian Regional Commission (ARC)

TABLE 7

COMMUTER PATTERNS

TO	Athens	Hocking	Perry	Meigs	Gallia	Jackson	Vinton	Outside Region	Labor Force in County
Athens	13,270	552	73	73	0	0	43	817	14,828
Hocking	427	4,335	54	7		14	35	1,305	6,177
Perry	69	245	4,315					2,775	7,405
Meigs	586	6		3,209	294	102	53	809	5,059
Gallia	40			52	5,751	105	20	654	6,622
Jackson	13	16			84	6,308	142	225	6,788
Vinton	85	80		8	8	227	1,607	400	2,415
Outside Region	531	107	372	220	381	340	60		
Total Employment In County	15,021	5,341	4,814	3,569	6,518	7,096	1,960	6,985	49,294

Source: U. S. Bureau of the Census 1970

TABLE 8

SUMMARY ANALYSIS OF COMMUTER DATA

County	Employment In Region	Labor Force Residing In Region	Out Commuters	% Out Commuters	In Commuters	% In Commuters	Net + or - of Employed Labor Force	% + or - Commuters ÷ Same
Athens	15,021	14,828	1,558	10.50	1,751	11.66	+ 193	+ 1.3
Hocking	5,341	6,177	1,842	29.82	1,006	18.83	- 836	-13.53
Perry	4,814	7,405	3,090	41.73	499	10.36	-2,591	-34.99
Meigs	3,569	5,059	1,850	36.57	360	10.08	-1,490	-29.45
Gallia	6,518	6,622	871	13.15	767	11.77	- 104	- 1.57
Jackson	7,096	6,788	480	7.07	788	11.11	+ 308	+ 4.53
Vinton	1,960	2,415	808	33.46	353	18.01	- 455	-18.84
TOTAL	44,319	49,294	10,499	21.30	5,524	12.46	-4,975	-10.09

NOTE: Total workers going from Region to outside Region to work 6,985
Total workers coming into Region to work from Outside Region 2,011

Net Loss 4,974

Source: U. S. Bureau of the Census 1970

TABLE 9

MODE OF TRANSPORTATION TO WORK

County	Private Auto Driver	Auto Pass.	Bus or Streetcar	Taxi	Walked Only	Other Means	Work at Home	Total Work Force
Athens	10,898	2,258	215	68	2,573	401	575	16,988
Hocking	4,515	825	12	66	562	371	131	6,482
Perry	6,056	974	24	13	623	291	254	8,235
Meigs	4,009	535	19	34	447	237	302	5,583
Gallia	5,288	552	16	78	914	254	405	7,507
Jackson	5,354	1,165	24	39	745	541	267	8,135
Vinton	1,877	260	8	0	228	189	122	2,684
TOTAL	37,997	6,569	318	298	6,092	2,284	2,056	55,614
%	68.32	11.81	.57	.54	10.95	4.11	3.70	

Source: U. S. Bureau of the Census 1970 and the Appalachian Regional Commission (ARC)

who may be skilled and employable, often find the lack of transportation a major obstacle to useful employment. School age children, especially those from rural areas and poorer families, may find themselves excluded from extracurriular activities because they depend on the regular school buses for transportation

ORIGINS AND PLANNING[2]

AORTA was started as a rural transportation demonstration project by the Tri-County Community Action Agency (CAA) of Athens, Hocking and Perry counties. Operations began on December 1, 1971, in Hocking County, with a 1963 model school bus acquired from GSA and driven by "Mainstream" enrollees of the CAA. On December 1, 1972, the Hocking County Rural Bus System marked a full year of operation with close to 2,000 passengers. Most of these were elderly, though the system was geared to supply transportation to people of all ages and incomes.

On March 15, 1973, the CAA began operation of the Athens Transit Company, to serve Athens County, including the City of Athens and twenty-five other communities. The Athens system interfaced with the Hocking system, providing transportation between the counties.

On May 13, 1973, the CAA was awarded a grant of $37,772 by the Appalachian Regional Commission, to renew support of the existing sytem and to establish a pilot bus service in Perry County. Unfortunately, since Perry County has not provided its matching share of funds for the development of the AORTA system, borad coverage of that county has not been feasible. This has means that only about 70% coverage of the original three county service area has been achieved, instead of the 90% coverage originally projected.[3]

The Tri-County bus system was incorporated as the Appalachian Ohio Regional Transit Association on March 22, 1974, AORTA signed

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[2]Much of the following history of AORTA was taken from AORTA: "The Lone and Winding Road", by Rich Coyveaux, Andy Conrad and Chongchit Sripun; a term paper presented to Professor Hugh M. Culbertson, School of Journalism, Ohio University, February 13, 1976; Part I, pp. 3 ff.

[3]AORTA First Annual Progress Report, July 1, 1973 - June 30, 1974, p. 3.

a contract with the City of Athens to provide bus service to and from the city swimming pool. In the Fall of that year a contract for public bus service was drawn up between AORTA and the City of Athens, calling for twice the amount of service previously offered.[4] Since then, AORTA's service in the city has expanded to three routes, serving the public including some 13,000 students at Ohio University.

Section 147 Planning

AORTA learned of the Section 147 Program through its consultant, Brian Noble, President of Enterprise Unlimited Corporation, Severna Park, Maryland. Mr. Noble's services had been provided to AORTA by funding from the Appalachian Regional Commission. Much of the technical planning for the Section 147 Program was done by Mr. Noble, who also assisted in preparation of AORTA's proposal for Section 147 funding. The proposal was submitted on June 9, 1975.

AORTA's proposal for a Section 147 grant sought funding which would enable expansion of its service to Gallia, Jackson, Meigs, and Vinton counties, and through this expansion establish a self-sufficient transit system by the end of three years. Four short-range and four long-range objectives were cited:[5]

A. Short-Range Objectives

1. Establish public transportation in Meigs, Vinton, Jackson, and Gallia counties.

2. Demonstrate the methodology for establishing rural public transportation as a self-sufficient, permanent feature of Southeastern Ohio.

3. Establish a comprehensive transit system through a regional approach designed to coordinate duplicated and fragmented transportation services.

4. Relieve the isolation of rural youth, poor, elderly, handicapped, and otherwise disadvantaged.

B. Long-Range Objectives

1. Improve the general economic and social conditions of Southeastern Ohio.

2. Provide the region with a balance of transportation modes as a safeguard against fuel shortages.

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[4]AORTA 1975 Annual Report

[5]AORTA's Proposal . . . , pp. 2-3.

3. Develop a regional capability to assess, address and remedy future public transportation needs.

4. Develop, with other transit operators, a complete network of transportation facilities within the Appalachian area and the State of Ohio.

General public participation in the planning process for the Section 147 demonstration was obtained in meetings held in different areas of the region. These meetings were announced in local newspapers and by letters distributed to target groups. Participation in the planning process by citizens' groups, public agencies, and federal, state, and local governments was also sought. Those that participated and the role played by each are summarized in Table 10.

An ad hoc committee to solicit long term commitment was formed. It included over twenty representatives from social service and community action agencies, local goverment, the Jackson County Council of Churches, and potential users of the system.

Prior to writing the proposal a number of local community and social service agencies helped to identify transportation needs and existing transportation resources in the area. These agencies included local community action agencies, agencies on aging, welfare departments, retired senior volunteer programs, and 169 and 648 boards (boards appointed by County Commissioners to allocate and monitor state and federal funds for mental health and retardation programs).

Representatives of business and employers also participated in sessions with ad hoc planning committees. The data from these meetings were used to estimate business and employer transportation needs. According to AORTA's management the ad hoc committee meetings and other groups contacted provided an accurate estimate of transportation needs.

AORTA's policy-making Board of Trustees also received input from representatives of elderly, poor and handicapped citizens.

In September, 1975 AORTA received preliminary notification that its Section 147 proposal would be funded. After a successful public hearing, final notification of funding was made in March, 1976.

It should be noted that AORTA's long-term purpose of providing transportation service to all seven couties is independent of the Section 147 program, in the sense that planning and seeking of funds would have been pursued apart from Section 147 funding. The immediate effect of the Section 147 grant is to facilitate the extension of service to area counties - Jackson,

TABLE 10

AGENCY, GOVERNMENTAL AND BUSINESS INVOLVEMENT

Group or Organization	Nature of Involvement	Financial Commitment
Appalachian Regional Commission	Funded consultant; assisted in planning; subsidy	$72,772 (1974-75)
Ohio Valley Regional Planning Commission	Technical assistance	2,000
Buckeye Hills - Hocking Valley Regional Development District	Technical assistance	2,000
Tri-County (Athens, Hocking, Perry) Community Action Agency (CAA)	Original AORTA sponsor. Helped assess client travel needs and available transportation resources. Contracted for bus service	
Jackson-Vinton CAA	Administrative operations	1,000 - 2,000
Gallia-Meigs CAA	Administrative operations	3,000 - 4,000
Gallia-Meigs-Jackson-Vinton County Commissioners	Drivers' salaries	20,000 (ETA)
City of Athens	Contracted for bus service. Arranged for bulk gas purchase Provided storage	60,000 (1973-76)
Commission on Aging	Pooled and shared resources	
Agencies on Aging	Helped assess needs and resources	5,000 (Title VII)
Welfare Departments	Helped assess needs and resources. Contracted for bus service.	20,000 (Title XX)
Retired Senior Volunteer Programs	Helped assess needs and resources	
169 and 648 Boards	Helped assess needs and resources	
Jackson County Council of Churches		$ 2,500
Business and employers	Participated in planning	

Gallia, Meigs, and Vinton - where service has been non-existent.

OPERATIONS

As noted above, AORTA began rural transportation operations in 1971 in Hocking County, and expanded service to Athens and Perry Counties, including the City of Athens in 1973.

City of Athens

AORTA's city operation accounted for over half of the system's total operating time and over 80 percent of total ridership in Fiscal Year 1976. AORTA operates three routes in the City of Athens on an annual contract basis. In calendar 1976 AORTA charged the city $8.75 per vehicle hour, less fares collected. In 1977 the charge has been increased to $9.33 per vehicle hour. In 1976 the city authorized $40,000 of general Revenue Sharing funds to subsidize the three routes. State Elderly Bus Fare Assistance funding augmented fares collected to keep the city's share at $40,000.

AORTA also has arranged with the City of Athens for bulk gasoline purchase. The cost to AORTA is about 44 cents per gallon. AORTA's average cost for all gasoline is about 50 cents per gallon.

County Service

In November, 1975, AORTA took its first step beyond the original three-county area to provide service in Vinton County.[6] This service was developed in cooperation with the Vinton County Commission on Aging (COA) and provides COA clients with transportation to meal sites, clinics and various activities. However, AORTA is seeking ridership from the general public, e.g. coal miners commuting to and from the mines.

Ridership and operating statistics for the Athens, Hocking and Vinton rural systems and the three Athens City routes, for the year ending June 30, 1976, are summarized in Tables 11 and 12.

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[6]Coyveaux, et al, AORTA: "The Long and Winding Road", Part II, p. 3.

TABLE 11

AORTA SYSTEM RIDERSHIP

Route	- FY 1974 -		- FY 1975 -		- FY 1976 -	
	Total Passengers	Senior Citizens	Total Passengers	Senior Citizens	Total Passengers	Senior Citizens
Athens Rural	7,214	4,099	11.027	4,533	10,210	8,579
Hocking Rural	9,594	4,511	10,641	5,793	15,664	9,139
Vinton Rural	X	X	X	X	899	785
Athens City #1	27,930	7,297	85,210	12,524	77,178	10,288
Athens City #2	11,970	X	39,745	7,481	42,871	8,202
Athens City #3	X	X	X	X	4,031	198
Charter	2,460	X	7,441	1,930	5,981	644
Total	59,168	15,907	154,064	32,261	156,834	37,835

Source: AORTA Annual Reports, Fiscal Years 1974 and 1975: Progress Report, Fourth Quarter, Fiscal Year 1976.

TABLE 12

RIDERSHIP AND COST STATISTICS

	Fiscal Year		
	1974	1975	1976
Total Passengers	57,010	160,890	156,834
Days of Operation	293		281.5
Average Passengers/Day	194.5		557
Total Operating Hours	8219	12,582	15,014
Average Passengers/Hour	6.94	12.79	10.45
Total Operating Mileage	178,561	238,748	236,215
Average Passengers/Mile	0.32	0.67	0.67
Total System Cost	$68,378	$137,707	$176,477
Average Cost/Passenger	$1.20	$.86	$1.13
Average Cost/Hour	$8.32	$10.94	$11.75
Average Cost/Mile	$.38	$.58	$.75

Source: AORTA Annual Reports Fiscal Years 1974 and 1975; Progress Report, Fourth Quarter Fiscal Year 1976

TABLE 13

AORTA VEHICLES

Number	Make	Year	Capacity
2	Dodge	1974	12
2	Dodge	1969	40
4	GMC	1973	18
1	Flexette	1974	23
1	Argosy	1976	23
5	Metro Transit (INT)	1977	30 (on order)
2*	Carpenter Cadet	1977	16

*16(b)2 vehicles.

"Reserve-a-Ride".

On November 22, 1976, AORTA began "Reserve-a-Ride", a demand-responsive service in Athens County. "Reserve-a-Ride" is designed to provide door-to-door service to welfare recipients and the elderly, offering transportation at least once weekly into the City of Athens for shopping trips and essential services. Two-day advance reservations are required. "Reserve-a-Ride" has enabled AORTA to change and in some cases eliminate fixed-route service to areas where service demand is low.

Vehicles.

Currently AORTA is operating ten vehicles, ranging in capacity from twelve to forty passengers. To serve the proposed expanded service area, five thirty-passenger and two sixteen-passenger buses are on order. (See Table 13).

COORDINATION WITH AGENCIES AND BUSINESSES

Two keys to AORTA's establishement of a region-wide transportation system are 1) The coordination of separate transportation services now being provided by social service agencies, and 2) provision of transportation to and from work to employees of area industry and business. AORTA's approach to coordination has been systematic and incremental. This has been a major reason for AORTA's accomplishments to date.

Social Service Agencies.

The coordination of separate agency transportation services means contracting with the agencies to provide transportation for their clients.

Early in its history, AORTA secured a contract to provide transportation for the Hocking County CAA nutrition program. The Hocking agency had been experiencing severe funding cutbacks and AORTA agreed to provide the necessary services for the funds available. These covered only 60% of AORTA's costs, and the balance had to be absorbed by government subsidies.

In November, 1975, AORTA contracted with the Vinton County Commission on Aging (COA) to provide its clients with transportation to meal sites, clinics and activities. While this service is provided primarily for the elderly, AORTA is seeking to attract commuters and the general public.

AORTA has also contracted to provide bus service for the Athens County Welfare Department. In general, however, contracts with social service agency have been difficult to obtain. "Turfism" is the main

obstacle. Each agency attempts to hold onto its own power base, budget and jobs.

The uncoordinated supply of transportation is the result of a succession of legislative acts and grants which have addressed specific problems in a piecemeal fashion. If the funds now provided to separate agencies for transportation purposes were transferred to a single transportation provider, such as AORTA, various agency programs would be compelled to seek service from one system, which could provide it in a coordinated manner.

State Elderly Bus Fare Assistance Program.

An important factor in encouraging future coordination of agencies with AORTA is the State Elderly Bus Fare Assistance (SEBFA) Program. Through this program the State of Ohio allocated to the counties a total of $2 million based on $0.35 per capita of total population of participating townships. This money is to be used to support public transportation that provides service to the elderly. Since AORTA is such a system, this program is expected to enable and encourage the counties in AORTA's service area to support the system sooner than they might otherwise have done. To date, AORTA has received $32,000 of SEBFA funds. In turn, AORTA must provide service to the elderly during all hours of service, for at least 15¢ less than the regular fare.

The SEBFA program was inaugurated October 1, 1975, to run for 58 weeks. It was later extended by 12 weeks. At this writing there are indications that the state legislature may continue the program in the next biennium.

Employers.

AORTA has approached employers in its service area to promote ridership by encouraging their employees to take the bus to work. Potential benefits to the employer include reduction of absenteeism and tardiness. One company, Brooks Shoes in Hocking County, gave AORTA a list of employees' addresses. The employees were contacted by mail and encouraged to ride the bus. Subsequently, ridership on the route serving Brooks Shoes increased from two to ten passengers per day, justifying continuation of the route.

A similar response has not been forthcoming from other area employers. One of the obstacles apparently is the unions in some plants. They have refused to let management release employee address lists.

AORTA also offers a commuter discount fare and has readjusted schedules on several routes to attract more work-trip passengers.

TABLE 14

FUNDING SOURCES

Source	FISCAL YEAR 1973	1974	1975	1976
Federal and State				
U.S. D.O.T. (Section 147)				6,280
Appalachian Regional Commission		37,772	35,000	34,906
Office of Economic Opportunity	23,000			
Ohio Department of Economic and Community Development		600	1,200	
Counties and Cities				
Tri-County Community Action Agency (OEC)			3,698	
(inkind)	10,000		967	
Athens County (Revenue sharing)	2,500	4,833	3,455	
Hocking County (Revenue sharing)			4,832	
(Emergency Employment Act)	5,000	7,587		
City of Athens (Revenue sharing)	2,500	8,763		
(inkind)			1,705	
CETA and inkind				18,800
Title XX				1,032
Earned				
Fares		15,517	18,709	28,840
Contract Services (includes $40,000 from City of Athens/Revenue sharing in FY '76)		1,376	27,801	60,690
Charter Services		2,338	7,815	11,261
Advertising Revenues		2,081	1,718	3,207
Leasing				1,570
Accounts receivable (charters and contracts)			20,049	
Total earned	4,000	21,312	76,092	105,568
Depreciation reserves				7,858
Total, all sources	47,000	80,867	126,949	174,444

TABLE 15

EXPENDITURES

	FY 1974	FY 1975	FY 1976
Administrative	17,975	34,274	47,408
Operations	50,403	91,590	125,976
Total	68,378	125,864	173,384
Receipts			
Local Government	21,184	14,659	19,832
State and Federal	38,372	46,897	41,186
Depreciation Reserves			7,858
Earned	21,313	76,151	105,568
Total	80,869	137,707	174,444

TABLE 16

PERCENTAGE OF COST RECOVERY

Source of Revenue (%)	Fiscal Year		
	1974	1975	1976
Federal	38.49	32.63	23
Local	33.09	11.60	16
Earned	28.43	55.77	61
	100.00	100.00	100

FINANCES

A stated objective of AORTA is the establishment of rural public transportation as a "self-sufficient, permanent feature of Southeastern Ohio." The Section 147 proposal stated that earned and contracted revenues were expected to cover 60 percent of the system's operating expenses by the end of the first funding year, with 75 percent recovery expected by the end of the second year and the break-even point to be reached by the end of the third year.

The amounts of sources of AORTA's earned revenues and subsidies for Fiscal Years 1973-1976 are listed in Table 14. Receipts and expenditures for Fiscal Years 1974-1976 are summarized in Table 15. From these tables it will be seen that as earned revenues have increased over the years, the proportion of earned revenues to total income and to expenditures has also increased. The percentage of costs recovered by earned revenues doubled from Fiscal 1974 to 1975, and increased by 10 percent from 1975 to 1976 (See Table 16). As of the end of the Fiscal Year 1976, AORTA was ahead of schedule in its drive for self-sufficiency.

Expansion of AORTA's routes under the Section 147 demonstration project, and increasing contracts with industry and social service agencies, are expected to create additional ridership and revenues. The proportion of administrative costs to the total budget, currently about 27 percent, is expected to decrease as the system's operation expands and the relatively constant administrative costs are spread over a larger total budget.

Sources of financial support available to AORTA in the period beyond Section 147 funding are expected to include:

1. City of Athens
2. County Commissioners--CETA
3. Title XX
4. Title VII and Title III of AOA
5. State Elderly Bus Fare Assistance
6. In-Kind Contributions
7. Earned Revenues
   a. Fares
   b. Charter revenues
   c. Advertising revenues

MARKETING AND PROMOTION

When AORTA inaugurated its first route in December, 1971, it was a week before the system had its first passenger. This experience taught the agency the value of informing potential riders about the service. Promotion and marketing have been important aspects of AORTA's operation ever since.

AORTA's Section 147 proposal set forth the following public relations and advertising objectives of the system:[7]

1. Educate riders and potential riders about the system through all media.

2. Promote the image of a friendly personalized bus system with the emphasis on transporting passengers to their destination.

3. Stress the sound environmental reasons why AORTA would be beneficial to the area (lessening of traffic congestion, savings on gasoline, etc.)

4. Explain how AORTA can benefit those persons who might otherwise be without transportation (taking school children to recreational areas, libraries, etc.; taking the elderly and poor to medical facilities, shopping, etc.)

5. Overcome the image held by residents that the bus system is for poor people and/or senior citizens alone. Explain that these buses are for everyone of all ages and income.

6. Advise all social service agencies, merchants and government leaders in the area about AORTA operations and facilities.

7. Stress how AORTA is working to meet the transportation needs of all residents of the region.

8. Promote AORTA's special contract services available for any local business group or special service organization in the hope of lessening duplication of service.

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[7] AORTA's Proposal...., pp. 91-2

9. View the market as segmented ... with special attention to potential user groups, such as : isolated rural residents; commuters; senior citizens; handicapped and otherwise transportation disadvantaged; youth; housewives; employers; government agencies; social service organizations; merchants and other businessman; media.

AORTA has directed its advertising and promotional efforts through a variety of channels. Most important among these are:[8]

1. Paid Advertisements. AORTA's Director feels that "only through paid ads can AORTA feel certain that the complete unaltered content of the message will be communicated." AORTA has used paid ads in local newspapers and radio.

2. Free Media Exposure. AORTA makes use of public service announcements to communicate information such as schedule and route changes. These announcements serve also to keep AORTA's name before the public.

   Local merchants have been asked to insert statements in their ads encouraging the public to ride the AORTA bus to their stores, including, where appropriate, the name of the bus route and the schedule.

   News releases, and speaking engagements in which AORTA's Director addresses local educational, civic, social service and governmental groups, also provide AORTA with media exposure.

3. Circulation of Schedules. Delivery of printed routes and schedules to homes located near the routes has been an effective means of promotion. On one occasion, local Boy Scouts delivered the material in exchange for credit on a charter trip. This promotion had the extra benefit to AORTA of promoting goodwill through the system's association with the Scouts.

4. Building a Good Community Image. Perhaps the most important type of promotion AORTA uses is the building of good public relation through friendly, efficient and reliable service. Such an image encourages favorable word-of-mouth communication among local residents, one of the most effective means of advertising in rural areas.

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[8]Much of the following is taken from a memo, Jeff Allred to Douglas McKelvey, Jan. 21, 1977, based on a visit to AORTA in December, 1976.

Drivers, who represent the system to the riding public, are encouraged to create a freindly, helpful atmosphere on the bus. Occasional acts "beyond the call of duty" -- such as returning a lost billfold to a passenger's home -- have received newspaper publicity and created goodwill for AORTA.

The present AORTA staff lacks both the time and the necessary skills to carry on a more effective promotional program. Lack of skill in graphics was cited as an example of a deficiency which has caused considerable problems.

A full-time public relations officer position was originally included in AORTA's Section 147 budget request, but was deleted from the final draft. AORTA's Director feels that the greatest problem in the system's promotional efforts is the lack of a full-time public relations person with the needed skills.

Two other means by which AORTA has tried to increase ridership have been the effort to obtain contracts to provide service to clients of social service agencies, and persuading area employers to encourage their employees to take the bus to work. These efforts are discussed in more detail under "Coordination with Agencies and Businesses."

CONCLUSION

AORTA's experience to date has been far from trouble-free, but many of the difficulties that have plagued other systems have not troubled AORTA, at least to the same degree. Planning for the Section 147 demonstration was made easier by the fact that AORTA had had three years' operating experience before learning of the Section 147 program.

AORTA's expansion into its service area has been gradual and incremental, allowing for adjustments based on work experience before attempting further expansion. This gradual approach to expansion, a concerted effort to promote a positive public image of the AORTA system, and, above all, a dedication to efficient, convenient and friendly service to the public, are the basis of AORTA's success to date and its future promise. Also key to AORTA's success has been a skilled manager and consultant.

A stated objective of AORTA is the establishment of rural public transportation as a "self-sufficient, permanent feature of southeastern Ohio." AORTA realized that dependence on federal operating subsidies for continued funding is unrealistic. There are no continuing federal DOT operating assistance programs. To survive, AORTA must continue to promote coordination, obtain funding from local and state levels, and above all, promote public goodwill.

RURAL PUBLIC HIGHWAY TRANSPORTATION DEMONSTRATION PROGRAM
DATA INTAKE FORM 01
BASELINE PROJECT OBJECTIVES AND TARGET POPULATION

01 (1-2)

Project Number: 002 (3-5)

Date: 12/10 (6-9)

CARD NO. 011 (10-12)

1. Project Name: AORTA (13-48)

(49-80)

2. Sponsor Organization: APPALACHIAN OHIO REGIONAL TRANSIT (13-48)

ASSOCIATION (49-80)

CARD NO. 013 (10-12)

2a. Type of organization sponsoring the S.147 project (CIRCLE ALL THAT APPLY)

State Department of Transportation 13-1
Other State governmental agency 14-1
County government 15-1
City or other local government 16-1
Regional planning district of council of governments 17-1
Transportation authority 18-1
Community Action Agency 19-1
Indian Tribe 20-1
Other (SPECIFY)
Private Non-profit Corp. . . . XXXX

3. Project Objectives (Narrative):

The paramount objectives include Expanding the service area of the Rural Transit system to serve a seven county region; to coordinate existing services and enter into contracts with various agencies to help establish the transit system as a "self-sufficient" service.

Establish new service XXXX
Coordinate existing services XXXX
Expand existing services XXXX
Establish regional transit authority . . . 25-1
Organize volunteer services XXXX
Plan XXXX
_____ . . . 28-1
Other. 29-1

RURAL PUBLIC HIGHWAY TRANSPORTATION DEMONSTRATION PROGRAM
DATA INTAKE FORM 01 (continued)

01 (1 2)

Project Number: 002 (3 4 5)

Date: 12/10 (6 7 8 9)

0 4 (10 11 12)

4. Operating Environment (Narrative): Southeastern Ohio is characterized by the foothills of the Appalachian Mountains. 95% of the roads traveled or to be traveled are two-laned and, in general, in fair condition.

(a) Terrain: Flat 13-1
Hilly XX
Mountains . . . . . -3

(b) Temperature (°F)
Avg. High ___ (14 15) Avg. Low ___ (16 17)

(c) % of total vehicle mileage on unpaved roads 10 (18 19)

(d) days per year of extremely adverse weather conditions ___ (20 21)

5. Area served: Total population in project area: 00184275 (22 29)

Area served in square miles: 03395 (30 34)

Service provided state-wide? Yes 35-1
No XX

Number of counties served: 007 (36 37 38)

List of counties served (by name)

Athens	Gallia	
Hocking	Perry	
Jackson	Vinton	
Meigs		

6. Does this project provide transportation to persons or goods (through direct operations, contracts, payments or other methods?) (IF NO, THE REMAINING QUESTIONS ON THIS FORM DO NOT APPLY)
Yes XXXX
No . . . . . -2

7. Can any member of the general public in the service area use this service?
Yes XXXX
No . . . . . -2

RURAL PUBLIC HIGHWAY TRANSPORTATION DEMONSTRATION PROGRAM
DATA INTAKE FORM 01 (continued)

0	1
1	2

Project Number:

0	0	2
3	4	5

Date: 12/10
6 7 8 9

8. What is the Unduplicated Number of Persons with Restricted Mobility in the Service Area?

0|5| (10 11 12)

0	0	5	1	8	7	2
13						19

9. What is the Unduplicated Number of Persons Expected to Use the System Each Month? (see instructions)

0	0	1	0	0	0
20					25

10. Is special attention given in the system's design or operations to the needs of any particular target group? Yes . . . . . 26-1 No XXX

(IF YES, FILL IN THE FOLLOWING DATA FOR EACH GROUP)

Special Target Population Groups	Persons in Area Served by Project	Number of Persons Expected to Use the System Each Month
10.1 Elderly	6114 (27–32)	(33–38)
10.2 Poor	(39–44)	(45–50)
10.3 Minorities		
Black	9871 (51–56)	(57–62)
Oriental	(63–68)	(69–74)
American Indian	(13–18)	(19–24)
Spanish	(25–30)	(31–36)
Other	(37–41)	(42–47)
10.4 Handicapped	(40–53)	(54–59)
10.5 Social Service Agency Clients	(60–65)	(66–71)
10.6 Commuters & Workers	(13–18)	(19–24)
10.7 Youth	1811 (25–30)	(31–36)
10.8 Others (SPECIFY) _____	(37–42)	(43–48)

0|6| (10 11 12)

0|7| (10 11 12)

RURAL PUBLIC HIGHWAY TRANSPORTATION DEMONSTRATION PROGRAM

TA INTAKE FORM 02

PLANNED PROJECT CHARACTERISTICS

0	2
1	2

Project Title AORTA Project Number: | 0 | 0 | 2 | (3 4 5)

Date: 12/10 (6 7 8 9)

0	1	
10	11	12

SERVICE

1. Route Characteristics for the entire system: (CHECK all that apply)

Fixed Routes and Schedules, no deviations	X	13-1
Fixed Route with deviations (not more than 1/2 mile from route)		14-1
Fixed Schedules between points (no particular route)		15-1
Demand Responsive (no fixed routes or schedules)	X	16-1

*2. Total One-Way Route Mileage Each Month: | 1 | 6 | 1 | 5 | (17 18 19 20)

*3. Overall Monthly Frequency of Service: (Frequency = Monthly Vehicle Miles ÷ One-Way Route Miles) times per month | | | 1 | 3 | (21 22 23 24)

**4. Reservation Time in Advance: days | 2 | (25) or hours | | | (26 27)

5. Planned Monthly Vehicle Miles. (Total System) | 0 | 2 | 5 | 0 | 0 | 0 | (28 29 30 31 32 33)

6. Planned Monthly Seat Miles. (Total System) | 0 | 0 | 5 | 2 | 5 | 0 | 0 | 0 | (34 35 36 37 38 39 40 41) *Based on 21 seats per vehicle.

7. Planned One-Way Monthly Passengers. (Total System) | 0 | 2 | 0 | 0 | 0 | 0 | (42 43 44 45 46 47)

STAFF

8. Characteristics of Drivers:

Types of Drivers	Number of Drivers: Full Time	Part Time	Total
Volunteers	07 (48 49 50)	12 (51 52 53)	22 (54 55 56)
Salaried, Paid, and Contracted	04 (57 58 59)	16 (60 61 62)	20 (63 64 65)
Total	(66 67 68)	(69 70 71)	(72 73 74)

A70

*Fixed route systems (or portions of systems) only City & Rural

**Demand responsive systems (or portions of systems) only

RURAL PUBLIC HIGHWAY TRANSPORTATION DEMONSTRATION PROGRAM
DATA INTAKE FORM 02 (continued)
PLANNED PROJECT CHARACTERISTICS

Project Number: 002

Date: 12/10

9. Fares: Is this transportation service provided for free to all passengers? Yes. . 1
No . . XX

10. If no, please fill in the following information on one-way passenger fares:

One-Way Passenger Fares Charged	FLAT FARES: Dollars Per One-Way Passenger Trip $XX.XX	FLAT FARES: Average Cents Per Mile	GRADUATED FARES: Base Fare $XX.XX	GRADUATED FARES: Increment Per Mile (¢)	GRADUATED FARES: Average Fares Per Passenger Mile (¢)	Total Monthly Charges (If Applicable) $XX.XX
10.1 Regular Cash Fares with no Discount		05	00 25	05	05	
10.2 Special Cash Fares with Discount						
Shoppers						
Students						
Elderly		01	00 25	05		
Others (SPECIFY)						
Commutor			00	00	04	
10.3 Subscription Service/ Purchased Passes						
10.4 Cooperative Service						
10.5 Donations						

10.6 Total projected monthly income from fares = average fare times number of passengers = $ 50000

11. Contracts, Grants, and Contributions from All Agencies

Names of Agencies and others providing contracts, grants and contributions (a)	Agency Code	Expected Monthly Contract Contribution/ Revenues $XX,XXX (b)	REVENUES CONTRACTED: Per Vehicle Mile $X.XX (c)	Per Passenger $XX.XX (d)	Per Passenger Mile $X.XX (e)	Per Delivery $X.XX (f)
App. Reg. Commission	1	02500				
Title XX	2	00500				
Title III	3	00230				
City of Athens	4	03500				
CETA	5	01000				
Total of other remaining agencies	6	03003				

RURAL PUBLIC HIGHWAY TRANSPORTATION DEMONSTRATION PROGRAM
DATA INTAKE FORM 02 (continued)
PLANNED PROJECT CHARACTERISTICS

0	2
1	2

Project Number: | 0 | 0 | 2 | (3 4 5)

Date: 12/10 (6 7 8 9)

12. Fleet Characteristics:

0|8| 12a. Do you operate or plan to operate your own Transportation Service? (10 11 12) Yes XXX
No 2

12b. Provide the following information on all project vehicles (whether owned, leased, contracted, etc.)

VEHICLE FLEET CHARACTERISTICS

	Vehicle Type (c)	Make & Model (d)	Special Features (e)	CODING BLOCK (DO NOT USE)	Quantity (f)	Year (g)	Number of Seats (h)
	Auto			14 15 17 18 20 21 22 23 24			
				25 26 28 29 31 32 33 34 35			
				36 37 39 40 42 43 44 45 46			
	Station Wagon (5-9 seats)			47 48 50 51 53 54 55 56 57			
				58 59 61 62 64 65 66 67 68			
				69 70 72 73 75 76 77 78 79			
0|9| (10 11 12)				14 15 17 18 20 21 22 23 24			
	Van/Mini Bus (10-16 seats)	Dodge		25 26 28 29 31 32 33 34 35	2	74	12
		Dodge		36 37 39 40 42 43 44 45 46	2	69	40
		GMC		47 48 50 51 53 54 55 56 57	4	73	18
	Small Bus	Flxette		58 59 61 62 64 65 66 67 68	1	74	23
	(17-33 seats)	Argosy		69 70 72 73 75 76 77 78 79	1	76	23
1|0| (10 11 12)	School Bus (less than 31 seats)	Metro Transit (INT)		14 15 17 18 20 21 22 23 24	5	77	30
	(31 seats and above)			25 26 28 29 31 32 33 34 35			
	Transit Bus			36 37 39 40 42 43 44 45 46			
	(34 seats and above)			47 48 50 51 53 54 55 56 57			
	Other (SPECIFY)			58 59 61 62 64 65 66 67 68			
				69 70 72 73 75 76 77 78 79			
1|1| (10 11 12)				14 15 17 18 20 21 22 23 24			

RURAL PUBLIC HIGHWAY TRANSPORTATION DEMONSTRATION PROGRAM

DATA INTAKE FORM 03

BASELINE AREA TRANSPORTATION SERVICE AVAILABILITY

0 3 (1–2)

Project Title: A O R T A

Project Number: 0 0 2 (3–5)

Date: 1 2/1 0 (6–9)

Types of Service (1)	AVERAGE MONTHLY OPERATING CHARACTERISTICS								
		Number (2)	Vehicle Miles (3)	Seat Miles (4)	One-Way Route Mileage (5)	One-Way Passenger Trips (6)	No. of Vehicles (7)	Fares Per Passenger Mile (8)	
1. Intercity Bus Service	01	1					002		
2. Buses only inside towns	02								
3. Taxis	03	5					005		
4. Social Service Agencies	04								
5. Others	05								

List of companies summarized above

Name (9)	Type (10)	Service (11)	Location (12)
GREYHOUND	1		Athens
TAXI CABS	5		Athens, Nelsonville, Logan

PROGRESS FOR PEOPLE IN HUMAN RESOURCE AGENCY (HRA)
of the
Southeast Tennessee Rural Transportation System

SYSTEM IDENTIFICATION

Post Office Box 62
Dunlap, Tennessee 37311
(615) 949-2191
Mr. Billie Harmon, Transportation Manager

Date of Implementation of Demonstration: June 15, 1976, Non-demonstration service began November, 1974

Geographical Area Served: Bledsoe, Bradley, Grundy, Hamilton, McMinn, Meigs, Polk, Rhea, Marion and Sequatchie Counties

Trip Purposes/Target Population Served: Medical care, shopping, social services, employment, general purpose trips for the elderly, mentally handicapped, poor, and the general public in the area.

Number of Vehicles: The demonstration will provide 11 vans with 12-passenger capacity. (Prior to the demonstration, the system owned a fleet of 16 vehicles for various transportation components; in addition, HRA operates several vehicles (13) for Headstart purposes exclusively - these are not routinely included in the system description.

Special Equipment and Services: Vehicles are radio equipped. There is a dispatcher in each county; the system uses a simple computer monitoring system for recordkeeping and scheduling purposes.

Funding: Section 147 Demonstration - $247,789 for 2 years demonstration period - 16(b)2 - $72,000

Title III, Older Americans Act - $56,328 for FY 1976-77

Comprehensive Employment Training Act (CETA) for driver salaries through local counties - $19,136 for FY 1976-77

Local County In-kind Contributions - $13,000 for FY 1976-77

Other In-kind Contributions (Manpower, etc.) - $16,000 FY 1976-77

Progress for Human Resource Agency (through grant from Community Services Administration) - $358,146 for FY 1976-

ACTION - $4,000

TOTAL FUNDING 786,399

SYSTEM SUMMARY

The Progress for People Human Resource Agency (HRA) provides transportation for the elderly, handicapped, poor, and the general population of a ten county area. HRA has 25 vehicles. Two vehicles equipped for handicapped are on order. For the month of December, 1976, 8,939 one-way passenger trips were provided to a total of 1,478 unduplicated riders. This compares with 2,585 one-way trips in December, 1974. The riders are rural residents traveling within their county and sometimes across county lines for medical, shopping, social service, educational, employment, and general purpose trips.

Several innovative service techniques and arrangements are employed or proposed, such as a computer monitoring system for recordkeeping, radio dispatching system, a commuter system, a feeder system for long distance medical trips, and a taxi subsidy system for the elderly.

In addition to Section 147 Demonstration monies, the system also has grants and contracts from local Boards of Education, Title III of the Older Americans Act, its parent Community Services Administration organization (HRA) and numerous in-kind contributions.

INTRODUCTION

The Progress for People Human Resource Agency of Southeast Tennessee, known as HRA, provides demand responsive transportation services for 10,700 rural citizens in a ten county region in Southeast Tennessee. Transportation services are provided for medical, educational, employment, social service, and shopping trips, as well as general purpose trips.

HRA has been providing transportation since 1974. The Section 147 Demonstration funding has enabled HRA to expand services. It increased its fleet from 16 to 25 vehicles. Service for the semi-ambulatory and non-ambulatory will be available as soon as two specially equipped vehicles are delivered from the manufacturer (March, 1977). Service has been increased in the nine counties and has been expanded to adjoining Hamilton County, where formerly no transportation service for rural residents was available.

The 147 Demonstration will enable HRA to offer commuter service for rural residents of Marion County travelling to the City of Chattanooga for employment. This service will be implemented soon. A taxi subsidy program for elderly and low income persons will also be implemented soon. Both are part of the second year activities of the demonstration.

To facilitate service delivery, HRA is using a computer monitoring system to assist in its records management and scheduling. Once the computer software is perfected, it should be useful to other rural transportation operations. Another feature of the HRA system is its radio dispatching system. It is anticipated that it will increase efficiency and productivity. Since HRA has extensive data on ridership and system performance prior to installation of radio equipment, it will

be possible to compare productivity before and after radio communication.

In short the HRA demonstration, barring excessive political, institutional or equipment problems, should prove beneficial to other rural transportation systems and as a public transportation service for the rural residents of southeast Tennessee.

BACKGROUND

The Progress for People Human Resource Agency (HRA) was orginially funded by the Community Services Administration, formerly the U.S. Office of Economic Opportunity, in 1964. Its original functions included community organization, outreach services, and social service delivery.

The transportation component was incorporated in HRA's activities in 1974 as it became increasingly difficult to deliver other services of the agency because of the lack of adequate transportation. The Headstart Program and services for the elderly in particular demanded a well-organized transportation system. These programs could not have functioned well with volunteers or the personal cars of the caseworkers.

HRA began with five vehicles, funded by the Administration on Aging (AOA), to serve nine counties. Three roving dispatchers traveled in advance to the counties to schedule riders on the appointed days in each county, eg., Tuesday and Friday each week in Bledsoe County. HRA management provided transportation to as many residents as possible and gave the aged priority. They received no negative feedback from AOA. Later they provided medical transportation with four additional vehicles and transportation with three station wagons. HRA's experience as a transportation provider increased the feasibility of developing a coordinated transportation system to serve the area. Coordination and more funding has enabled it to increase its fleet from four to twenty-seven vehicles. Improved transportation has in turn improved program and service delivery to the disadvantaged as well as the public.

A. GEOGRAPHICAL AND POPULATION CHARACTERISTICS

HRA spans ten counties in the southeastern region of Tennessee. It is situated between Cumberland Plateau, the Appalachian Ridge and the Appalachian Valley, and the Blue Ridge Mountains. The area is predominantly rural. Almost 90% of the land is used for agricultural activities, and 79% of the population lives in rural areas.

The counties included are: Bledsoe, Grundy, Bradley, Hamilton, McMinn, Marion, Meigs, Polk, Rhea, and Sequatchie. Major cities in the area are Chattanooga, Athens, and Cleveland. Chattanooga is the largest urban area and where most of the social service, medical and governmental agencies, and major transportation facilities are located.

TABLE 1

POPULATION DATA FOR TEN COUNTY SERVICE AREA OF HRA

County	Total Population	% Black	% White	% Aged 60 or more	% Age 14 or under
Bledsoe	7,643	5.28	94.72	15.06	26.85
Bradley	50,686	4.49	95.51	11.29	29.79
Grundy	10,631	0.14	99.86	15.72	29.15
Hamilton	254,236	18.24	81.76	14.18	27.50
McMinn	35,462	5.07	94.93	14.97	27.63
Marion	20,577	5.80	94.20	13.91	30.33
Meigs	5,219	3.31	96.69	13.99	28.30
Polk	11,669	0.03	99.97	14.36	27.97
Rhea	17,202	3.40	96.60	15.20	28.94
Sequatchie	6,331	0.01	99.99	13.71	30.09
District Totals	419,656	4.58	95.43	14.24	28.65

(1) Table adopted from Proposal for Southeast Tennessee Rural Mass Transportation Demonstration Project, submitted by Progress for People Human Resource Agency, June, 1975, Tables A-2, A-3, pp. IV-3 to IV-5.

TABLE 2

RURAL/URBAN DISTRIBUTION OF POPULATION
FOR 10 COUNTY SERVICE AREA

County	1970 Census Population	Population Density 1970	Residence 1970 (%) Rural Farm	Rural Non-Farm	Urban
Bledsoe	7,643	18.9	20.1	79.9	0.0
Bradley	50,686	151.1	5.4	43.7	50.9
Grundy	10,631	29.7	12.2	87.8	0.0
Hamilton	255,077	460.6	1.9	17.3	80.8
McMinn	35,462	81.9	11.7	44.5	43.8
Marion	20,577	40.7	5.8	76.5	15.7
Meigs	5,219	26.6	21.8	78.2	0.0
Polk	11,689	26.8	8.9	91.1	0.0
Rhea	17,202	53.9	18.6	56.1	25.3
Sequatchie	6,331	23.2	11.0	89.0	0.0
DISTRICT TOTALS	420,517	91.4	11.7	66.4	21.7

(2) Source: Revised from Proposal from Southeast Tennessee Rural Mass Transportation Demonstration Project, submitted by Progress for People Human Resources Agency, June, 1975.

TABLE 3

INCOME DATA FOR TEN COUNTY SERVICE AREA

	Poverty Level	
County	All Races	Non-White
Bledsoe	37.1	29.4
Bradley	16.8	38.4
Grundy	44.3	*
Hamilton	16.6	39.8
McMinn	21.1	37.0
Marion	29.1	40.6
Meigs	33.7	*
Polk	24.8	*
Rhea	28.6	46.0
Sequatchie	29.8	*
Tennessee	21.8	43.3
DISTRICT TOTALS	27.61	39.22

*Not Available

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(3) Source: Proposal for Southeast Tennessee Rural Mass Transportation Demonstration Project, submitted by Progress for People Human Resource Agency, June, 1975.

TABLE 4

HRA SENIOR MEDICAL TRANSPORTATION SERVICE
Disposition of Requests by Age for April, 1975

Age in Years	Services Provided	Services Unmet*
0-5	88	192
6-15	217	94
16-25	36	97
26-40	67	185
41-59	167	216
60-64	354	107
65-69	395	125
70-74	387	97
Over 75	319	82
TOTALS	2,030	1,195
%	63%	37%

Total Requests - 3,225

*An unmet request is one not fulfilled on the same day requested, though it may be met at a later date in the week. Unmet demand is calculated daily.

(4) Revised from Proposal for Southeast Tennessee Rural Mass Transportation Demonstration Project, submitted by Progress for People Human Resource Agency, June, 1975.

TABLE 5

PROJECTED NEED FOR TRANSPORTATION SERVICES FOR NON-AMBULATORY

County of Residence	Total Number of Persons Receiving Supplementary Security Income Due To Total Disability
Bledsoe	123
Bradley	422
Grundy	143
Marion	251
McMinn	249
Meigs	63
Polk	182
Rhea	240
Sequatchie	82
TOTAL	1,755*

Source: Social Security Administration, Chattanooga District Office February, 1975

*Assumed that there are probably even more disabled individuals who may use service but are not on supplementary income for one reason or another.

Table Revised from Proposal from Southeast Tennessee Rural Mass Transportation Demonstration Project, submitted by Progress for People Human Resource Agency, June, 1975.

Though improvements are being made, over 55% of the rural roads in the area are unpaved. This creates obvious transportation problems. There are also natural barriers such as the Tennessee River and ridges and valleys which limit travel between the western and eastern parts of the region.

Bradley, Hamilton, Marion, and McMinn counties comprise the major industrially developed areas. The major industry is the Dupont Company. There is also coal mining, a few garment factories, and some furniture manufacturing. Most of the residents are involved with forestry or agriculture. Other employment is with recreation and park facilities such as the Cherokee Natural Forest, the Prentice Cooper State Forest and a number of Tennessee Valley Authority sites.

The Southeast Tennessee Development District is a growing area. In 1970 the population was 420,927 (See Tables 1, 2 and 3). It has had a growth rate of nine percent per decade for the past twenty years. However, 28 percent of the ten-county residents have incomes below the poverty level.

The percentage of non-whites below the poverty level is slightly higher (approximately 39.2%), even though non-whites represent only 4.6% of the population. This is in contrast to the 15 percent Black population in the State of Tennessee. The heaviest concentration of Black residents in the ten county area is in Hamilton County (Chattanooga).

The aged (60 years or over) are a significant group in the area. Approximately 14.2 percent of the residents of the ten county region are elderly. Many of HRA's services are designed to serve this group. The young comprise 29 percent of the area's populace, and a significant portion of the HRA transportation is designed for them and funded by H.E.W. (Headstart and retarded) and by the local Boards of Education.

B. AVAILABLE TRANSPORTATION FACILITIES

The region is served by the interstate road system, especially in the Chattanooga metropolitan area. Additional links are in the planning state. Rail facilities are still adequate, even in the rural counties. Water transportation is also important in the region for freight movement. Barges move up and down the Tennessee River. A major airport facility in Hamilton County (Chattanooga) serves the entire area.

However there are limited public transportation services in the counties. There are more than three-hundred twenty-seven (327) publicly and privately owned school buses, but these are used only for transporting school children. Many churches operate buses (85) in the area, but these too are restricted to church-related activities. There are taxi companies (12), but together they have only 35 taxis to serve the nine county area (exclusive of Hamilton).

Within Chattanooga the Chattanooga Area Regional Transportation Authority (CARTA) provides direct service to and from the central business district. In addition, there are several volunteer groups, such as the American Cancer Society and the Heart Association that provide transportation service (including emergency service).

HRA is the largest single public transportation provider in the area with twenty-five vehicles and two on order. Prior to the Section 147 Demonstration it operated 16 vehicles that provided service for the aged and the general public for medical, shopping, and social service trips. The U.S. Department of Health, Education and Welfare (HEW) continues to fund 13 additional vehicles to transport Headstart enrollees. However, because of HEW restrictions, these vehicles are not coordinated with the other vehicles to provide public transportation services.

ORIGINS AND PLANNING

A. NEED FOR EXPANDED TRANSPORTATION SERVICES

As indicated in the previous section, HRA is the major public transportation provider in the area. Their services have been designed primarily for the young (Headstart), the elderly and low income persons (shopping and medical trips). The lack of funds and vehicles have limited service for other travel needs, especially work trips, even though private vehicle ownership statistics suggest there is a need for public transit to work.

HRA has been unable to satisfy the demands of the target population and therefore unable to encourage ridership by the general public. Table 4, taken from the HRA Demonstration Proposal, shows that 377 of the 3,225 requests for April, 1975, were unmet.[1]

One of HRA's major objectives is to satisfy the demand for public transportation by expanding its services and coordinating with other available services and funds. The extent to which HRA can accomplish this will be measured by the evaluation and information from its computerized tracking system. The information collected and the software developed will be valuable contributions to local, state and federal planners and policy makers.

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[1] Unmet demands are those requests that cannot be served on the same day. The computerized recordkeeping system provided this and other useful information.

B. COOPERATION

Based on the demonstrated demand for increased public transportation service, HRA approached various local, state and federal agencies and officials for support of the Section 147 Demonstration Proposal. The essential features of the proposed demonstration were explained by letter and in meetings by the HRA's officers and staff. Subsequently, many agencies and officials wrote letters of support expressing their confidence in HRA's ability to administer the demonstration, and their commitment to encourage their clients and constituency to use the system.

The nine judges (county commissioners), mayors, the departments of public health, a private physician, departments of welfare (social service), and county boards of education supported the demonstration. Most of these organizations and individuals had clients who used the HRA service previously or interacted with the HRA staff. This past contact increased their willingness to cooperate.

HRA's continuing effort to coordinate with other transportation providers and areas has enabled it to expand service to all of Hamilton County, (excluding Chattanooga). When the proposal was written only the northern portion of Hamilton County was served. Negotiations regarding the provision of service to all of the county are being finalized.

HRA's emphasis on coordination is also reflected in funding and service provision. HRA receives funding from several sources that are earmarked for specific services. HRA satisfies those transportation needs through a coordinated approach to transportation delivery. This has resulted in diversified service, scheduling and routing. This requires a flexible and well managed system. HRA has been able to satisfy agency requirements and still operate a "coordinated" system.

C. PROPOSED ACTIVITIES AND ACCOMPLISHMENTS

HRA defined objectives for the Section 147 demonstration period. It developed monitoring and evaluation procedures and information to measure its progress and efficiency. The information management techniques and monitoring procedures are very innovative. The accomplishments and shortcomings of this demonstration will be useful to other rural transportation systems.

HRA has identified six objectives to accomplish over the 24 month demonstration period. They are:

1. Demonstrate the comparative effectiveness of a demand-responsive system which gives priority to requests based on trip destination rather than personal eligibility criteria. It expects to serve 2,000 unduplicated riders per month.

2. Measure the impact of radio communication on the effectiveness of rural transportation delivery. HRA hopes to decrease deadhead miles, increase ridership, more effectively respond to emergency situations, and reduce costs per passenger.

3. Demonstrate increased utilization by non-ambulatory riders (100 unduplicated riders per month) using two specially equipped vehicles.

4. Determine the feasibility of transporting rural commuters for employment purposes to urban areas. HRA has targeted 48 unduplicated persons per month to utilize this service and possibly more if the system serves all 3 shifts. (HRA has subsequently decided not to serve 3 shifts) This service, if feasible, should increase spendable income and decrease traffic accidents, fuel consumption, and costs to individual riders.

5. Assess the effectiveness of a taxi subsidy program for the elderly and handicapped. Four hundred unduplicated persons are projected to use this taxi subsidy service each month, once it is fully operational. This plan is proposed with the view that several trip purposes, especially for the elderly and handicapped, are most effectively served by a smaller vehicle, yet the cost of unsubsidized trips is prohibitive to most of the individuals. HRA hopes to coordinate the taxi subsidy program with the 12 passenger van demand-responsive system.

6. Demonstrate the usefulness of a computer tracking system to improve the management, monitoring, evaluation, and planning of rural transportation services. It should result in more effective management of personnel, vehicles, scheduling and routing. The system will also allow on-the-spot assessment of progress and shortcomings, statistical summaries for completing forms from the different funding sources, and more efficiency with a vehicle maintenance schedule.

The HRA's planning and development process is discussed in more detail in the Planning Summary.

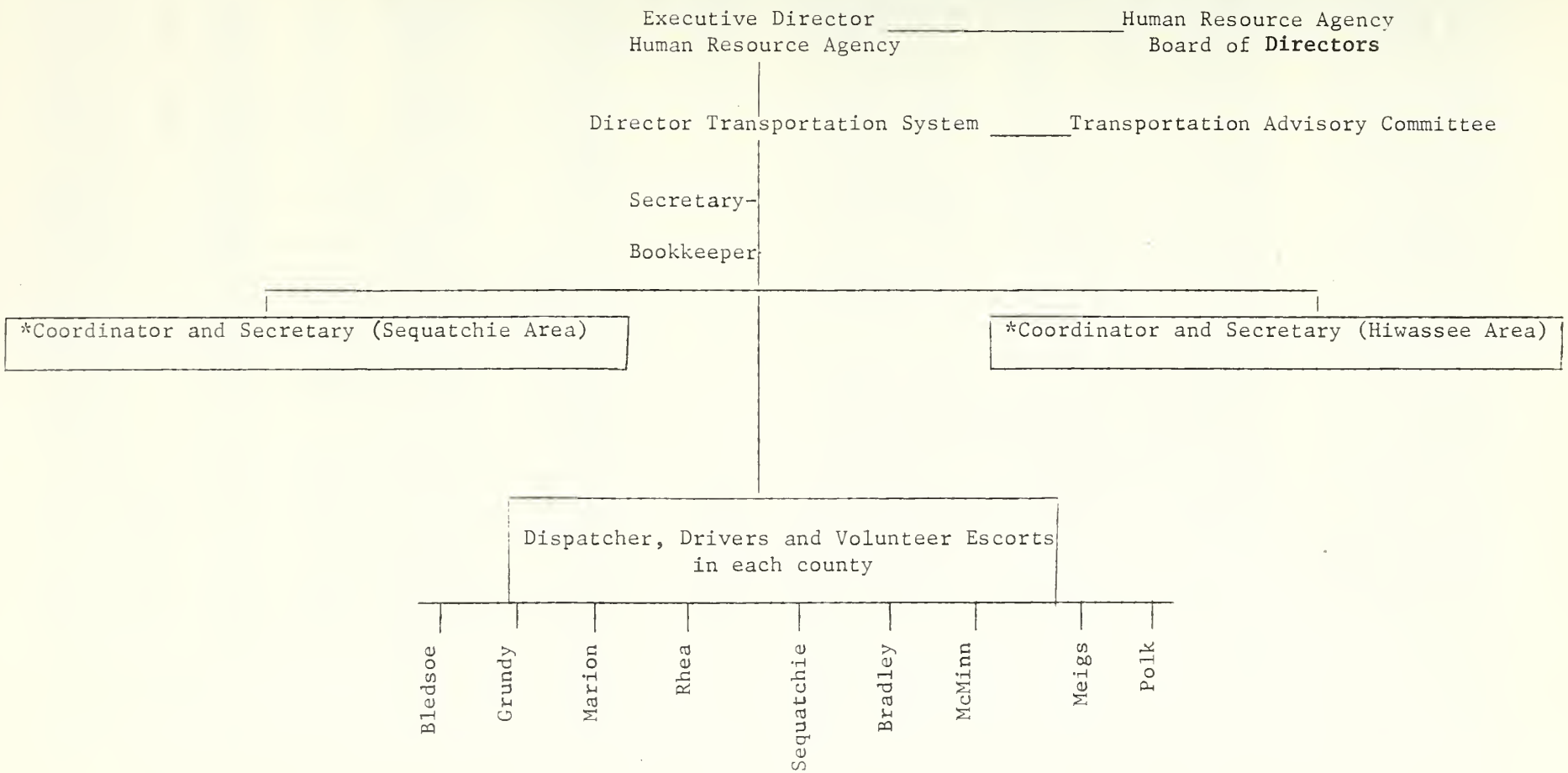
OPERATIONS

ORGANIZATION

The HRA's transportation service is a component of the Progress for People Human Resource Agency, a grantee of the U.S. Community Services Administration (formerly Office of Economic Opportunity). In addition to transportation services, the agency administrates social, housing, emergency food, medical, health, and senior citizen services. Also, it operates neighborhood service centers, Headstart, and other child

Figure I

ORGANIZATIONAL CHART OF THE HUMAN RESOURCE AGENCY REGIONAL TRANSPORTATION SYSTEM



*positions to be funded by Federal Aid Highway Act of 1973 Demo Section 147: these staff persons will be primarily responsible for developing and monitoring demonstration projects in Marion County and Cleveland/Bradley County areas.

Source: The HRA Section 147 proposal.

development programs.

The transportation component is directed by Mr. Billie Harmon. There is a Transportation Advisory Committee made up of local citizenry, and there is a Board of Directors composed of the nine county judges. Daily operations are carried out by a bookkeeper (who serves the entire agency), a secretary, coordinators for each of the major areas, a dispatcher in each county, drivers and volunteer escorts. (See Figure 1 for the organization.)

The variety of funding sources has both increased and decreased HRA's ability to provide coordinated and flexible transportation service. The coordination has resulted in more support, vehicles, and funding from agencies like the Southeast Tennessee Area Office on Aging, Community Services Agency, and the Chattanooga Area Regional Council of Governments (CARCOG). However, these agencies have different service areas, funding requirements and objectives. This has resulted in some regulatory problems, more data collection and reporting, and other problems. However, HRA has been effective in resolving them. HRA now has a fleet of 25 vehicles with the same color scheme and lettering. This is a visible sign of coordination.

One coordination and funding problem HRA is currently trying to resolve is how to obtain reimbursement for medicaid transportation services. The state social service agency believes that only emergency trips provided by HRA are eligible for reimbursement. This is a problem that does need to be resolved. (Possibly the respective Federal Regional Office can be of assistance.)

SERVICE PRIOR TO THE DEMONSTRATION

Service

The HRA offered a demand-responsive service. It required 24 hour advance reservation. Service was provided one to three days per week for each county. There was also fixed route service to Chattanooga.

Vehicles

The Progress for People Human Resource Agency (HRA) began operating five vehicles for Senior Citizens in 1974 and a medical transportation service with a fleet of four vehicles. The HRA also operated a low-income citizen transportation service using three station wagons.

The HRA had three target groups. They were:

1. senior citizens,
2. persons of any age or income needing transportation to health facilities,
3. low-income persons living in the Sequatchie sub-region needing transportation services.

Prior to the Section 147 demonstration, the HRA operated a total of seventeen vehicles for public use. The vehicles included fifteen twelve-

passenger vehicles, one twenty-passenger vehicle, and one fifteen-passenger vehicle. The HRA also operated thirteen vehicles for the Headstart Program in nine rural counties. However, the latter vehicles were and are not available for public transportation. Some limited emergency service is provided by volunteer organizations such as the American Cancer Society.

Equipment

None of the HRA's vehicles were equipped with the special features necessary to transport non-ambulatory passengers. Two will be equipped for non-ambulatory during the demonstration period.

Maintenance

The HRA initially used local vocational schools to maintain the vehicles in two counties, but this was not satisfactory. The schools were more interested in learning about the various maintenance tasks to be performed than providing tune-ups and other minor maintenance tasks on a continual basis. Currently, the Southeast Tennessee Transportation system contracts with private maintenance providers who can provide quality service and without delay. This is important so that the vehicles remain on the road as much as possible. The private providers give priority to the project vehicles. Each driver has some training in mechanics and therefore knows when to obtain preventive maintenance service. The new computerized maintenance program should result in even better preventive maintenance.

DEMONSTRATION SERVICE CHARACTERISTICS

Fixed Route and Demand Responsive Service

The HRA is providing demand responsive and fixed route public transportation in a ten county area in Southeast Tennessee. The demand responsive service is predominantly intracounty. It requires 24 hour advance reservation. The demonstration grant will result in more vehicles per county and a dispatcher in each county who is in communication with vans in his county as well as in other counties. There are also five fixed routes that lead to Chattanooga. This service is primarily for medical trips. In addition, the HRA provides service for Headstart, local boards of education, congregate for meal services and others.

During the demonstration it will also implement a taxi subsidy program and a commuter transit service. These are described next.

The expanded system provided almost 9,000 passenger trips in November 1976. See Table VII.

Table VII

Comparision of Ridership by County for HRA
for June 1976 and November 1976

	June 1976		November 1976	
County	One-Way Passenger Trips	Unduplicated Passenger Served	One-Way Passenger Trips	Unduplicated Passenger Served
Bledsoe	472	135	1731	209
Bradley	598	143	406	151
Grundy	617	116	626	104
Marion	699	109	912	114
McMinn	1128	260	1199	273
Meigs	143	56	465	90
Polk	280	77	366	78
Rhea	1602	178	1919	213
Sequatchie	1119	199	1285	244
Hamilton	*	*	30	2
TOTAL DISTRICT	6658	1273	8939	1478

*Not begun until 1976

Source: Printout #HSB00121 by UMIS for Progress for People Human Resource Agency, July and December, 1976.

The Taxi Subsidy Program

The taxi subsidy program is scheduled to begin in February, 1977. It would provide a 65¢ subsidy for riders of the target population. The target population has not been finalized. However, it will probably include medicare patients, the elderly, and the handicapped in the City of Cleveland and Bradley County. HRA is negotiating with the Cleveland City taxi operators to provide an additional discount. It is expected that a discount of 15¢ would finally emerge. This means that the cost to the rider in the program would be the fare minus 65¢ minus the discount which taxi companies finally agree to provide.

Hence, the taxi subsidy program is an important aspect of the demonstration. It will expand service delivery to the elderly and emergency riders and also allow increased utilization of existing services. HRA hopes to coordinate taxi services with service provided by its own vans.

One interesting development has been the decline in taxi cab companies in the City of Cleveland from eleven to one. The reason for this was local politics. The local cab operators were being regulated out of business. The Cleveland City Council recently passed an ordinance which prohibited the taxi operator from cruising the street or from parking any place other than the designated taxi stand. This would not be so unfortunate except that there is only one taxi stand in the City of Cleveland.

Commuter Transit

A feasibility study of commuter service has been completed. This too is an important addition to HRA's service and their effort to expand beyond a specialized ridership service delivery (medical clients, Headstart, etc.). The commuter transit service will begin operation in the spring of 1977. Four vehicles have been ordered. The service will operate like a van pool with one of the commuters agreeing to drive and maintain the van and other riders contributing. Three vans will operate on fixed routes and use the park and ride approach. The fourth vehicle will offer door-to-door service. The commuter transit service will be evaluated after three months to determine the benefits and costs of both approaches to commuter transit. Then, a decision will be made on the type and extent of commuter service to be offered.

Vehicles

Prior to the Section 147 demonstration, the system used sixteen vehicles to provide transportation primarily for agencies, Headstart, the elderly, handicapped, and other low income people. The demonstration grant will initially provide nine new vehicles (12-passenger vans). See Table VIII. These will be part of a coordinated public transportation system in the ten county area. These vehicles will provide transportation services for persons of all ages and incomes and for a variety of purposes. In addition, two vehicles are on order that are specially equipped for the non-ambulatory. They will accomodate both ambulatory and non-ambulatory persons. By the end of the demonstration the HRA will have

TABLE VIII

HRA VEHICLE INVENTORY

Make	Year	Model	Quantity	Pass. Capacity	Comments
Ford	1974	Econoline	6	12	Originally 7, one wrecked
Ford	1975	Econoline	3	12	
Ford	1976	Econoline	7	12	Purchased with Section 147 funds
Dodge	1977	Maxivan	1	15	Replaced wrecked Ford van
Chevrolet	1976	School Bus Chassis/ Body	1	20	

* six more vehicles will be purchased with funds from UMTA's Section 16(b)2 program in 1977.

a fleet of 39 vehicles. The HRA will continue to operate 13 additional vehicles used solely for Headstart. All the vehicles will be maintained by private garages in the respective counties.

Radio Dispatch System

The radio dispatch system was installed in December 1976. It is a valuable addition to the transportation program. Each county has a central dispatch station and each of the vehicles has been equipped with a two-way communication system. When a passenger phones the dispatcher for service, the dispatcher will schedule the trip. If the vehicle is on the road he may call the vehicle and thus serve an additional passenger sooner or at a small incremental cost. It is expected that efficiency will increase and occupancy as much as double. The system is already providing more service and traveling fewer miles than prior to the radio system.

The radio system is a GE telephone system. It consists of ten dispatch units, 33 phones, and two repeaters. The total cost of the communication system was approximately $73,000. The Section 147 program provided $53,000. The other $20,000 came from a variety of sources including CSA, Hamilton County, Regional Medical Program and COA funds.

The FCC license for the system was not as difficult to obtain as expected. The GE representative said that it would take six months to obtain the license. With the assistance of Tennessee Senator Brock, the HRA received their FCC license within four weeks.

Drivers and Escorts

The HRA has 37 full-time drivers and 10 part-time drivers. Many of the drivers are women. Most earn from $2.30 to $2.70 per hour. Many are paid by the CETA funds from the respective counties. The drivers are reliable and complete the daily logs developed by HRA without problems. The part-time drivers drive mostly on weekends.

The HRA system also has escorts. These are volunteers. They assist passengers on and off the vehicle when appropriate and assist in other ways.

COORDINATION

The HRA has been able to coordinate service in ten counties. This is possible because from its inception it offered service to specialized groups but insisted on doing it by coordinating vehicles and funds. It has been able to resolve most problems resulting from coordination such as vehicle use, completing reports from different funding agencies and cash flow problems. It has painted old and new vehicles in the same color and printed 'Rural Transportation' on the side of each to put forth a coordinated and public image. More information on coordination is included in the Case Study under 'Origins and Planning, Cooperation'.

PROMOTION

The HRA has engaged in a minimal amount of promotional activities because they have been unable to satisfy existing demand. Prior to the demonstration (April 1975) there were 1,195 unmet demands. After the arrival of nine new vehicles there were still 170 unmet demands for four vehicles in September, 1976. The HRA feels that if the rural transit system were heavily promoted, the demand for service would far exceed the service capacity of the system. This would further increase the unmet needs and disappoint many potential riders. If the system attempted to satisfy all unmet demands it could result in inefficiency and overworked employees and vehicles. This could result in higher maintenance costs and down time, leading to more unmet demands. In the past, Director, Billie Harmon has personally contacted health and social service organizations in the service area, making presentations on the rural transit system and how it can benefit the organization and their clients. A schedule and contact number was also provided. During the four month period following the visits and calls, demand increased significantly. At the beginning of the promotional effort the system was serving 1,800 passenger trips per month and recorded 121 unmet services. Four months later the system was serving 2,585 passenger trips per month and recorded 979 unmet services.

The amount of advertising in the media has been minimal. A local radio station has provided free ads (though it is not known how often). In addition, a Chattanooga newspaper ran a public interest story on the transportation system last year (1976) and was planning a follow-up story in February, 1977.*

In short, the impact of Harmon's promotion and common sense have meant that HRA will promote only that service which it is sure it can satisfy. Recent statistics indicate that 4 vehicles have no unmet demands. These will be the first routes and counties to be promoted.

The Computer Tracking System

The Human Resource Agency HRA has an innovative approach to monitoring and evaluation. It is called the computer tracking system. Billie Harmon, the Director, originated the idea and a COA planner helped refine the system. The system is being developed with the assistance of the Urban Management Information System (UMIS), an administrative unit of the City of Chattanooga. The processing cost to the HRA is about $800 per year.

The computer tracking system summarizes trip maker and trip characteristics by vehicle, person and county. When a passenger calls for the time, information such as name, address, age, sex, race and monthly income are recorded and later keypunched. The trip is then scheduled. The trips that are provided are recorded by the driver on a daily log. The log is given to the dispatcher at the end of each day. The dispatcher in turn revises his records and adds any unscheduled riders and destinations.

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*Source: Southeast Tennessee-Progress for People: Site Visit Summary. Prepared by Jeff Allred for the Transportation Institute, N.C.A&T State University, January, 1977.

Later the dispatcher submits the information on record cards for keypunching. The information is then keypunched and processed by computer. The processing is done on a Singer Frieden Data Entry Unity System operated by UMIS in Chattanooga.

Summaries are printed montly by UMIS and delivered to the HRA Transportation Director. The reports summarize (1) the characteristics of the passengers, (2) the trip destinations for each vehicle (Passenger Destination Statistics), (3) travel by each vehicle (Vehicle Utilization Statistics), (4) the number of unmet services, (5) the number of unduplicated riders, and (6) the number of trips by individual passengers (Passenger List).

The monthly summaries have saved the management considerable time when completing the forms required by the different funding agencies. The information will also be useful for evaluating performance and alternative routes and schedules.

Also the HRA hopes to use its computerized tracking system to develop a preventive maintenance schedule. It is assumed that such a schedule will decrease preventive maintenance cost and improve reliability. (To our knowledge this will be the first rural system to have attempted this.)

FINANCES

Revenues

The HRA receives funding or contributions from more than six sources. These are listed in Table IX. . In addition, they have contracts with local boards of education and the Headstart program. At the time of this writing $87,000 of $247,789 Section 147 grant has been received. This amount was used mainly to purchase eleven new vehicles.

Costs

The total expenditures for the first quarter of the demonstration (July 1, 1976 - November 1, 1976) were $289,870. Almost one-half of the expenditures, $141,582, was for capital equipment. When the cost of capital equipment is subtracted, the "operating costs" for the period amount to $147,288. If these operating costs are extrapolated, the operating costs for the year would be $441,864. See Table X.

One component of operating costs is insurance. Obtaining "reasonably priced" insurance has been a problem for many rural transit operators. They are paying from $400 to $3000 per year per vehicle.* Some suggest that the major reason for the high cost of insurance is the lack of historical data by which underwriters can determine the degree of risk involved in insuring a rural transit system. The HRA has been fortunate in obtaining insurance for their 18 vehicle fleet for an annual cost of $8,295. HRA Director Billie Harmon informed us that eleven of his vehicles

*Based on comments received at the Section 147 Conference in December, 1976.

TABLE IX

FUNDING SOURCES AND ESTIMATED AMOUNTS

Source	Fiscal Year 1974-75	1975-76	1976-77
U.S. Department of Transportation			
Section 147			$247,789
16(b)2			72,000
U.S. Community Services Administration (CSA) (formerly OEO)	80,000-100,000	150,000-200,000	358,146
Title III, Older Americans Act	65,000	83,000	56,328
Mid-South Regional Medical Program	31,238	52,000	
ACTION-Retired Senion Volunteer Program (RSVP)		4,000	4,000
Counties (CETA)	35,000	35,000	19,136
Counties (in-kind)	13,000	13,000	13,000
Other in-kind (volunteer escorts for Senior Transportation vehicles)	16,896	16,896	16,000
Total	$241,134-261,134	353,896-403,896	786,399

Table X

HRA Transportation
Total Expenditures for the First Quarter
(July 1, 1976-November 1, 1976)

Personnel:	
Administrative	$16,780
Drivers	$70,058
Dispatchers	$23,142
Sub-total	$109,980
Maintenance and Repairs:	
Fuel and Oil	10,574
Repairs	5,073
Sub-total	$15,647
*Insurance	8,295*
Office	13,961
Monitoring and Evaluation	350
Vehicle Purchase	67,903
Vehicle Communications System	73,679
Licenses	55
Total Expenditures (July-Nov. 1976)	$289,870

*Annual insurance premium paid.

Source: FHWA Intake Form #06 prepared by Progress for People Human Resource Agency

are covered for $100,000/$300,000/$100,000 at a premium of $226 per vehicle per year. The seven vehicles purchased under Section 147 are covered for $1 million at a premium of $771 per vehicle per year.

Administrative costs as defined by the HRA are composed of three items - administrative personnel, office expenses, and monitoring and evaluation. The total of these three components for the quarter is $31,091. Projecting each cost separately for the year, the figures are $50,340 for administrative personnel, $41,883 for office expenses, and $1,400 for monitoring and evaluation. (It should be noted that the HRA has requested additional funds for one more person to carry out the monitoring and evaluation effort.) Combined, the estimated annual administrative cost is $93,623, or 21% of total operating costs.

CONCLUSIONS

The Progress for People Human Resources Agency of Southeast Tennessee has grown from a specialized multi-county sixteen bus system in 1974, to a twenty-seven vehicle multipurpose public transportation system. It has been able to coordinate vehicles and funding from a variety of agencies. It has overcome regulatory problems. It has expanded service systematically. It has been careful to promote only that service which it knows it can provide. It has built support locally among agencies, school boards, and county judges. It has and will be implementing a number of innovations such as a computerized information management system, a taxi subsidy program and a commuter transit service.

This expansion and success has not been without problems, such as only having 20 days to prepare the Section 147 proposal after receipt of the final guidelines, amending state PUC regulations regarding fares and charters, and obtaining reimbursement for transportation provided to medicaid clients:

Much of this system's accomplishments (coordination and ridership) is attributed to the Transportation Director, Mr. Billie Harmon and his sensitive, bold and systematic approach to rural transportation. Mr. Harmon's efforts, however, would not have been as effective without the support and cooperation of his capable staff.

RURAL PUBLIC HIGHWAY TRANSPORTATION DEMONSTRATION PROGRAM
DATA INTAKE FORM 01 (continued)

0 1 (1)

Project Number: (4 5)

Date: 0 1 1 1 2 (6 7 8 9)

0 4 (10 11 12)

4. Operating Environment (Narrative):

(a) Terrain: Flat 13-1
Hilly . . . . . -2
Mountains . . . . . -3

(b) Temperature (°F)
Avg. High 6 9 (14 15) Avg. Low 4 7 (16 17)

(c) % of total vehicle mileage on unpaved roads 3 8 % (18 19)

(d) days per year of extremely adverse weather conditions 1 1 5 (21)

5. Area served: Total population in project area: 2 8 5 4 2 0 (22 29)

Area served in square miles: 3 7 1 2 (30 34)

Service provided state-wide? Yes 35-1
No . . . . . -2

Number of counties served: 1 0 (36 37 38)

List of counties served (by name)

Bledsoe	Marion	Rhea
Bradley	Meigs	Sequatchie
Grundy	Mc Minn	
Hamilton (excluding Chatt.)	Polk	

6. Does this project provide transportation to persons or goods (through direct operations, contracts, payments or other methods?) Yes . . . . . 39-1 No . . . . . -2
(IF NO, THE REMAINING QUESTIONS ON THIS FORM DO NOT APPLY)

7. Can any member of the general public in the service area use this service? Yes . . . . . 40-1 No . . . . . -2

RURAL PUBLIC HIGHWAY TRANSPORTATION DEMONSTRATION PROGRAM
DATA INTAKE FORM 01 (continued)

0 (1 2)

Project Number: (3 4 5)

Date: 8/1/82 (6 7 8 9)

8. What is the Unduplicated Number of Persons with Restricted Mobility in the Service Area?

0 5 (10 11 12)

7291 5 (13 – 19)

9. What is the Unduplicated Number of Persons Expected to Use the System Each Month (see instructions)

7291 5 (20 – 25)

10. Is special attention given in the system's design or operations to the needs of any particular target group? Yes . . . . . (26-1) No . . . . . -2

(IF YES, FILL IN THE FOLLOWING DATA FOR EACH GROUP)

Special Target Population Groups	Persons in Area Served by Project	Number of Persons Expected to Use the System Each Month
10.1 Elderly	33313 (27–32)	33313 (33–38)
10.2 Poor	49527 (39–44)	49527 (45–50)
10.3 Minorities		
Black	8295 (51–56)	8295 (57–62)
Oriental	(63–68)	(69–74)
0 6 (10 11 12) American Indian	(13–18)	(19–24)
Spanish	(25–30)	(31–36)
Other	(37–42)	(42–47)
10.4 Handicapped	1035 (48–53)	1035 (54–59)
10.5 Social Service Agency Clients	(60–65)	(66–71)
0 7 (10 11 12) 10.6 Commuters & Workers	(13–18)	(19–24)
10.7 Youth	(25–30)	(31–36)
10.8 Others (SPECIFY) _____	(37–42)	(43–48)

RURAL PUBLIC HIGHWAY TRANSPORTATION DEMONSTRATION PROGRAM
DATA INTAKE FORM 01
BASELINE PROJECT OBJECTIVES AND TARGET POPULATION

01

Project Number:

Date: 01 12

CARD NO. 01

1. Project Name:

SOUTHEAST TENNESSEE RURAL TRANSPORTATION SERVICE

2. Sponsor Organization:

PROGRESS FOR PEOPLE HUMAN RESOURCE AGENCY

CARD NO. 03

2a. Type of organization sponsoring the S.147 project (CIRCLE ALL THAT APPLY)

- State Department of Transportation or State governmental agency . . . 13-1
- County government . . . 15-1
- City or other local government . . . 16-1
- Regional planning district of council of governments . . . 17-1
- Transportation authority . . . 18-1
- Community Action Agency . . . (1)
- Indian Tribe . . . 20-1
- Other (SPECIFY) _____ . . . 21-1

3. Project Objectives (Narrative):

_____

_____

_____

_____

_____

_____

_____

_____

_____

- Establish new service . . . (22-1)
- Coordinate existing services . . . 23-1
- Expand existing services . . . (24-1)
- Establish regional transit authority . . . 25-
- Organize volunteer services . . . 26-1
- Plan . . . 27-1
- _____ . . . 28-1
- Other . . . 29-1

RURAL PUBLIC HIGHWAY TRANSPORTATION D ONSTRATION PROGRAM
DATA INTAKE FORM 02 (continued)
PLANNED PROJECT CHARACTERISTICS

0 2

Project Number:

Date: 04/12

12. Fleet Characteristics:

1 8 — 12a. Do you operate or plan to oper[illegible] your own Transportation Service? Yes . . . . . (1) No . . . . . -2

12b. Provide the following information on all project vehicles (whether owned, leased, contracted, etc.)

VEHICLE FLEET CHARACTERISTICS

Vehicle Type (c)	Make & Model (d)	Special Features (e)	CODING BLOCK (DO NOT USE)	Quantity (f)	Year (g)	Number of Seats (h)
Auto						
Station Wagon (5-9 seats)						
0 9 — Van/Mini Bus (10-16 seats)	Ford/Club Wagon	F. lic / A/c		2	F 76	12
	Dodge/Minivan	Radio/A/C		1	F 7	1 6
	Chevrolet van	Radio/ A/C		3	F [illegible]	1 2
Small Bus	Superior/Pace Mitted	Radio / A/c		1	F 4	2 0
(17-33 seats)						
School Bus 1 0 — (less than 31 seats)						
(31 seats and above)						
Transit Bus						
(34 seats and above)						
Other (SPECIFY)						
1 1 1 —						

RURAL PUBLIC HIGHWAY TRANSPORTATION DEMONSTRATION PROGRAM

DATA INTAKE FORM 02

PLANNED PROJECT CHARACTERISTICS

02 (1 2)

Project Title Southeast Texas Office Rural Transportation Project Number: ___ (3 4 5)

Date: __/__/__ (6 7 8 9)

0 (10 11 12)

SERVICE

1. Route Characteristics for the entire system: (CHECK all that apply)

Fixed Routes and Schedules, no deviations	☐ (13-1)
Fixed Route with deviations (not more than 1/2 mile from route)	☒ (14-1)
Fixed Schedules between points (no particular route)	☐ (15-1)
Demand Responsive (no fixed routes or schedules)	☒ (16-1)

*2. Total One-Way Route Mileage Each Month: 6230 (17 18 19 20)

*3. Overall Monthly Frequency of Service: (Frequency = Monthly Vehicle Miles ÷ One-Way Route Miles) 40 times per month (21 22 23 24)

**4. Reservation Time in Advance: days 0 (25) or hours 00 (26 27)

5. Planned Monthly Vehicle Miles. (Total System) 5[illegible]69 (28 29 30 31 32 33)

6. Planned Monthly Seat Miles. (Total System) 584579 (34 35 36 37 38 39 40 41)

7. Planned One-Way Monthly Passengers. (Total System) 4317 (42 43 44 45 46)

STAFF

8. Characteristics of Drivers:

Types of Drivers	Number of Drivers: Full Time	Part Time	Total
Volunteers (48 49 50 / 51 52 53 / 54 55 56)			
Salaried, Paid, and Contracted (57 58 59 / 60 61 62 / 63 64 65)	26		26
Total (66 67 68 / 69 70 71 / 72 73 74)	26		26

*Fixed route systems (or portions of systems) only

**Demand responsive systems (or portions of systems) only

RURAL PUBLIC HIGHWAY TRANSPORTATION DEMONSTRATION PROGRAM
DATA INTAKE FORM 02 (continued)
PLANNED PROJECT CHARACTERISTICS

0

Project Number:

Date: / /

0 2 — 9. Fares: Is this transportation service provided for free to all passengers? Yes - 1 No - 2

10. If no, please fill in the following information on one-way passenger fares:

One-Way Passenger Fares Charged	FLAT FARES: Dollars Per One-Way Passenger Trip $XX.XX	FLAT FARES: Average Cents Per Mile	GRADUATED FARES: Base Fare $XX.XX	GRADUATED FARES: Increment Per Mile (¢)	GRADUATED FARES: Average Fares Per Passenger Mile (¢)	Total Monthly Charges (If Applicable) $XX.XX
10.1 Regular Cash Fares with or Discount						
10.2 Special Cash Fares with Discount						
Shoppers						
0 3 — Students						
Elderly						
Others (SPECIFY)						
0 4 — _____						
_____						
10.3 Subscription Service/ Purchased Passes						
10.4 Cooperative Service						
0 5 — 10.5 Donations	25	1				

10.6 Total projected monthly income from fares = average fare times number of passengers = $ 376.75

11. Contracts, Grants, and Contributions from All Agencies

Names of Agencies and others providing contracts, grants and contributions (a)	Agency Code	Expected Monthly Contract Contribution/ Revenues $XX,XXX (b)	REVENUES CONTRACTED: Per Vehicle Mile $X.XX (c)	Per Passenger $XX.XX (d)	Per Passenger Mile $X.XX (e)	Per Delivery $X.XX (f)
CSA		3136				
0 6 — FHWA		2115				
COA		473				
RHEA Co Board of Education		300	30			
0 7 —						
Total of other remaining agencies		650				

RURAL PUBLIC HIGHWAY TRANSPORTATION DEMONSTRATION PROGRAM

DATA INTAKE FORM 03

BASELINE AREA TRANSPORTATION SERVICE AVAILABILITY

03

Project Title: Southeast Tennessee Rural Transportation Service Project Number:

Date. 5/11/2

Types of Service (1)	AVERAGE MONTHLY OPERATING CHARACTERISTICS							
	Number (2)	Vehicle Miles (3)	Seat Miles (4)	One-way Route Mileage (5)	One-Way Passenger Trips (6)	No. of Vehicles (7)	Fares Per Passenger Mile (8)	
1. Intercity Bus Service	0							
2. Buses only inside towns	0							
3. Taxi	1	NA	NA	NA	NA	10		
4. Social Service Agencies	1	NA	NA	NA	NA	1	0	
5. Others	0							

List of companies summarized above

Name (9)	Type (10)	Service (11)	Location (12)
Cleveland Yellow Cab Company	03	DR	Cleveland, Tennessee
Bradley County Health Dept.	04	DR	Cleveland, Tennessee

CASE STUDY

PEE DEE REGIONAL TRANSPORTATION AUTHORITY

INTRODUCTION

The Pee Dee Regional Transportation Authority (PDRTA) is an entirely new entity created to develop, coordinate and operate a comprehensive public transportation system for a six-county region in eastern South Carolina, centering on the city of Florence. The PDRTA will be responsible for operating and coordinating transportation services formerly provided by social service agencies, schools and technical education centers in the region, and expanding those services to the general public. Those responsibilities are pending successful negotiations of contracts for the provision of these services.

BACKGROUND AND SETTING

The Pee Dee RTA serves the region comprising Chesterfield, Darlington, Dillon, Florence, Marion, and Marlboro Counties, including the City of Florence (See Figure 1).

A comprehensive summary of statistics and trends in population, employment, and special needs of the region appears in the PDRTA's Section 147 proposal.[1] Population of the region by counties, with the number and percentages of poor, elderly, non-white and handicapped residents, is summarized in Table I.

Employment statistics for the region are summarized in Table II. Although the region is predominantly rural, agricultural employment dropped sharply over the ten-year period from 27% of total employment in 1960 to 9.6% in 1970. This drop was comparable to that of South Carolina as a whole but much greater than that of the nation. Manufacturing, on the other hand, accounted for 35.9% of total employment in the region in 1970, up from 21.6% in 1960 -- a much greater rate of increase than that of the state or the nation. The service-oriented on non-manufacturing sector employs the greatest share of the total work force in the region, 54.5% in 1970.

The shift from agricultural to manufacturing employment reflects the national trend toward mechanization of farming and the decline of the family farm. The rapid influx of industry into the region during the late 1960's and early 1970's absorbed much of the large labor pool formerly employed in agriculture. This pool of labor, the supply of relatively cheap land, and the favorable political climate attracted industry from the Northeast. Textiles and apparel are the major manufacturers,

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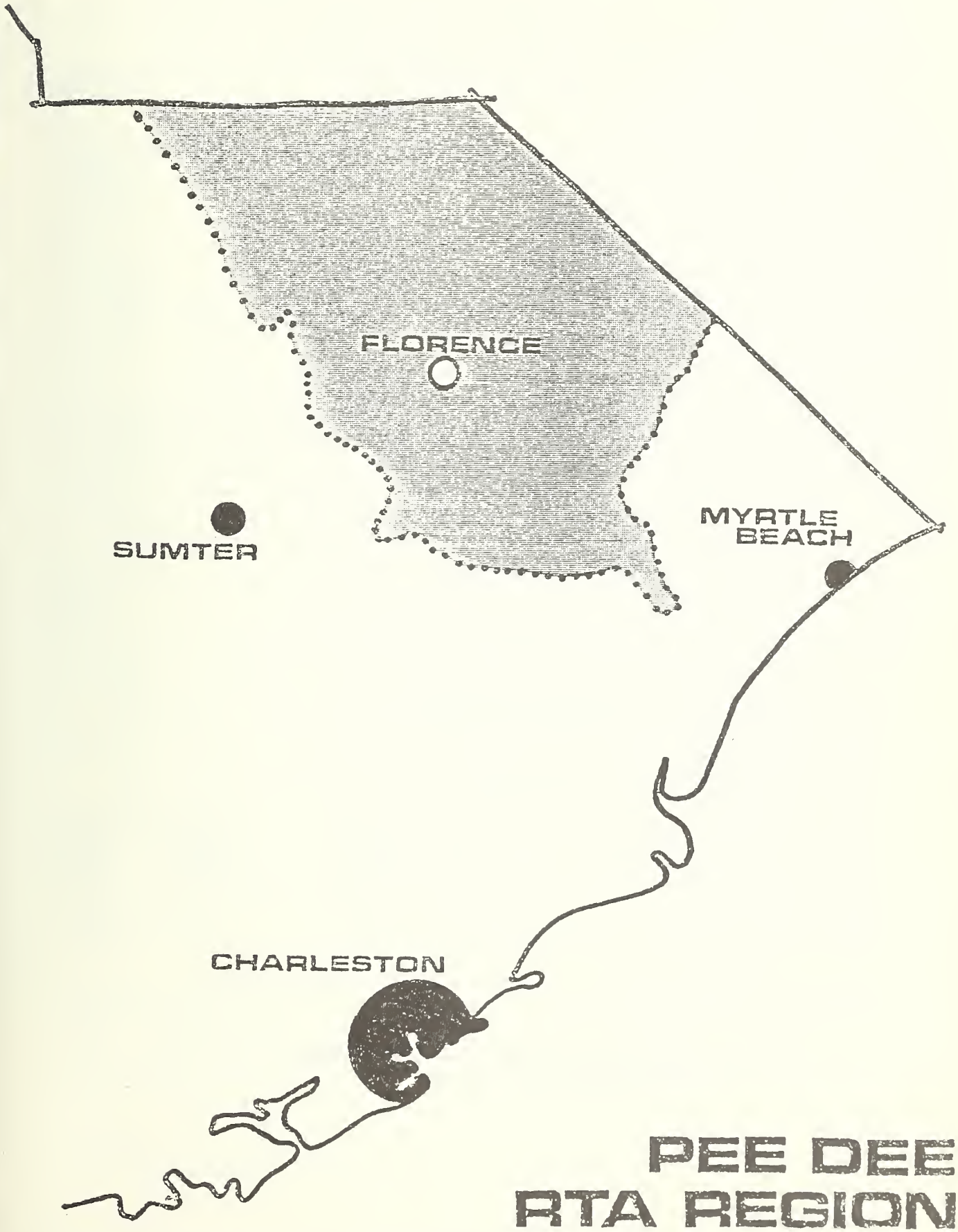
[1] Section 147: A Rural Highway Public Transportation Demonstration Program Application; Prepared for Pee Dee Regional Transit Authority, South Carolina, with assistance from Stephen Carter and Associates. June 9, 1975.

FIGURE 1



Source: PDRTA Section 147 Proposal

TABLE I

POPULATION DISTRIBUTION -- PEE DEE REGION (1)

	Total Population	Below Poverty Level	Elderly (65+)	Non-White	Handicapped (2)
Chesterfield	33,667	8,576	2,748	11,082	2,220
Darlington	53,442	14,444	3,874	20,311	3,789
Dillon	28,838	10,932	2,146	12,213	1,946
Florence	89,636	22,047	5,984	32,764	5,342
Marion	30,270	10,503	2,491	15,345	2,332
Marlboro	27,151	8,371	2,231	11,889	1,714
Total	263,004	74,873	19,474	103,604	17,343
Percentage		28%	7%	39%	7%

1) U.S. Census, 1970 2) South Carolina Census, 1974

TABLE II

EMPLOYMENT DISTRIBUTION
PEE DEE REGION
1960 - 1970

PERCENT OF TOTAL EMPLOYMENT

	Agriculture		Manufacturing		Nonmanufacturing	
	1960	1970	1960	1970	1960	1970
Region	27.0	9.6	21.6	35.9	51.4	54.5
South Carolina	14.5	6.4	29.6	32.9	55.9	60.7
United States	6.6	5.0	27.1	27.5	66.3	67.5

Source: Pee Dee Regional Planning and Development Council,
U.S. Census of Population 1960, 1970.

accounting for nearly half of all manufacturing employment. Lumber and wood products rank as the region's third largest manufacturing industry, although its role has been declining steadily in recent years. A notable diversification in manufacturing has occurred, with the percentage of all manufacturing employees engaged in industries other than textiles, apparel, lumbering or wood products rising from 32.3 in 1960 to 44.6 in 1970.

Population and economic characteristics and trends of the Pee Dee Region are summarized in the following, quoted from the PDRTA's Section 147 proposal:[2]

> "The overall trend in population and economy in the region seems to indicate a potential for further growth. Socially, the region is characterized by an older population, an increasing number of whites, an increasing number of females, and a high out-migration of non-whites and young males.
>
> Economically, there is a large potential labor force, a low prevailing wage scale, and a diminishing agricultural employment. Manufacturing and nonmanufacturing employment is increasing. In general, industry is on the increase. Nevertheless, there is still a serious lack of jobs. This is reflected by the high out-migration among the young males and non-whites, and higher than average unemployment rates. This situation may be attributed to a decline of agricultural employment without equivalent increases in other jobs, and rising education levels which create rising economic expectations.
>
> With the proper catalyst, economic growth could be accelerated. This would create more jobs and hopefully abate the high out-migration currently being experienced in the region. Employment and wages could thus be increased. Factors are favorable for industrial development. Certainly, there is sufficient labor available, building sites, and land. Transportation is the questionable figure. Improved transportation would undoubtedly help the region by attracting industry and by reducing commuting costs and times."

Transportation in the Pee Dee region is primarily by private automobile. In 1970, 99,359 passenger vehicles were registered, and 68.5% of the households in the region owned at least one car. Census data indicate that the private automobile is the predominant mode of commuting to work, and that a large portion of these cars carry only the driver.

Before the advent of the PDRTA there was no rural public transportation with the exception of taxicabs. Intercity service within and outside of the region is supplied by AMTRAK and Greyhound and Trailways buses. Within the City of Florence there is a private transit operator who provides service during the morning and afternoon peaks.

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[2] op. cit., p. 35

The only other transportation services are those provided by health and social service agencies and educational institutions for their clients. Table III lists the agencies, the number and capacity of their vehicles and the number of trips made per month.

TABLE III

TRANSPORTATION PROVIDERS

	Vehicles	Capacity	Trips/Month
Dillon-Marion CAA	4	12-pass.	137
Dillon Co. Council on Aging	1	12-pass.	
	4	6-pass.	967
Marion Co. Council on Aging	1	12-pass.	537
Darlington CAA	15	12 & 15 pass.	3,548
Chesterfield-Marlboro CAA	10	11-pass.	519
Chesterfield Co. Council on Aging	1	12-pass.	1,050
Marlboro Co. Council on Aging	1	12-pass.	271
Florence CAA	25	2-20 pass.	3,549
Florence Co. Council on Aging	3	12-pass.	450
VOC Rehab	1	10-pass.	50
	66		11,078

Source: PDRTA Section 147 Proposal

The transportation provided by these agencies has been uncoordinated and available only to individuals whose eligibility was determined by the providing or initiating agency. Four Community Action Agencies (CAA's) within the region provide transportation, under contract, to DSS Medicaid clients, Headstart pupils, Manpower trainees, and others. Vocational Rehabilitation (VOC REHAB) also provides some transportation to its clients. Other transportation is provided by social service case workers on a reimbursement basis. Because the provision of transportation depends on "client" status and prior arrangement, the agencies can meet only some of the transportation needs of some of the people. For instance, people eligible for services, but without a telephone by which to make the necessary arrangements, may go untended. Inefficiencies arise from the specialization of some of the other providers; for example, Council on Aging vans carry only people over 65. Excessive "down" time, when vehicles are not being used, contributes to less than maximum efficiency in use of existing equipment.

ORIGINS AND PLANNING

Community leaders in the Pee Dee Region, seeing the lack of an economical regionwide transportation system accessible to the general public,

and the duplication and inefficiency of agency-provided transportation, responded with the formation of the PDRTA in June, 1974. Other factors which led to the creation of PDRTA were an assessment of need by the Pee Dee Council of Governments, a grant of funds from the U.S. Department of Transportation (DOT), and contracts with the State Department of Social Services (DSS), the Community Services Administration (CSA) of the U.S. Department of Health, Education, and Welfare (HEW), and local planning agencies.

The PDRTA operates under the authority of House Bill #417 of 1973. The PDRTA operated for two years without paid staff, under the leadership of Ms. Nancy Finklea, Chairperson. Consultant, Stephen A. Carter, Managing Partner of Stephen Carter and Associates, was retained to assist in planning. The PDRTA and its consultant learned of the Section 147 program through Washington contacts in 1974. Stephen Carter and Associates assisted in preparing the proposal, which was submitted June 9, 1975. However, the PDRTA had only six weeks in which to obtain letters of commitment, coordinate ideas and prepare the Section 147 proposal, due to the late announcement of the final Section 147 guidelines.

Throughout the planning process, the PDRTA was conscious of its public mandate, and actively sought the participation of citizens, public agencies, and federal, state and local governments.

Public meetings were held in all geographical areas of the region, and were announced by newspaper advertisements and by letters to specific citizen groups. A public meeting was held to gain insight to perceived needs. This, however, was not considered a useful forum and the PDRTA resorted to one-to-one contact with known special interest groups. This process is continuing and will continue through the entire demonstration period and beyond.[3]

Public and governmental agencies and private businesses that participated in the planning process are listed in Table IV and the part played by each is summarized.

A preliminary draft of the proposal was submitted to the South Carolina Highway Department for review, and the State Division of Administration was asked for technical assistance. The state Highway Department was able only to make suggestions regarding the proposal submission procedures. Since South Carolina does not have a state-level agency which is responsible for public transportation, very little technical assistance was provided.

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[3] Stephen A. Carter, communication, February 1977.

[4] Stephen A. Carter, communication, February 1977.

TABLE IV

PROFILE OF AGENCY, GOVERNMENTAL, AND BUSINESS INVOLVEMENT

Group	Nature of Involvement	Commitment
Agencies on Aging	Goals, detn., funding information service delivery	ca. $40,000/yr.
Community Service Agencies	Goals detn., information service delivery	
Agencies for Handicapped	Goals determination	
County Social Service Agencies	Coordinating existing transportation services	
Pee Dee Regional Planning & Development Council	Assessment of need, assistance	
U.S. DOT	Advisory	
U.S. CSA (HEW)	Coordination	
S.C. Highway Department	Tech. assistance	
S.C. Public Service Comm.	Tech. assistance	
S.C. Insurance Commission	Advice on rates	
S.C. Department of Human Resources/Social Services	Contract negotiations, funding	ca. $50,000/yr.
City of Florence	Request to take over municipal service (privately operated)	
Trailways, Greyhound	Information	
County governments	Support	
Voc. Rehab. Agencies	Support, route coordination	
Dept. of Labor	Funding	ca. $60,000/yr.
Technical Education Centers	Support	

The final proposal stated that "the primary purpose of this demonstration project will be to illustrate the cost, energy, and manpower savings . . . possible through an optimization of available resources".[5]

Four specific objectives of the proposed demonstration program were:[6]

1. To offer better service to the approximately 28,000 residents of the region who currently qualify for transportation assistance due to age, health or income level.

2. To realize an annual saving of approximately 17 million gallons of gasoline (worth $8.5 million), which would otherwise be spent to provide private automobile service for the transportation dependent alone.

3. By offering a convenient, comfortable and safe alternative to the private automobile, to attract a high percentage of the 75,000 residents of the region who are part of the latent transportation demand category.

4. To demonstrate within the Pee Dee region the federal government's support of rural transportation programs, and so generate additional local support and confidence in the work of the PDRTA.

The PDRTA was notified in September, 1975, that its Section 147 proposal had been funded. At this time a search was begun for a system manager. The search lasted nine months, it was concluded with the hiring of Mr. Peter Bine as Executive Director in July, 1976. Mr. Bine was formerly a consultant with Wilbur Smith and Associates, and has had substantial experience in transportation.

On July 8, 1976, the PDRTA contracted with its consultant, Stephen Carter and Associates, for transportation planning services to be performed over the second half of 1976.[7] The services comprise fifteen tasks in four phases which may be summarized as follows:

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[5] Section 147 . . ., p. 2.

[6] Paraphrased from p. 4 of the Section 147 proposal.

[7] Letter, Stephen Carter & Associates to Ms. Nancy G. Finklea, Chairperson, Pee Dee RTA, July 7, 1976; Attachment A, Scope of Services; Attachment D, Schedule.

Phase I. Identification of Operating Parameters

1. Establish Regional Goals and Priorities

2. Analyze Special Purpose Program Restrictions (Provide the RTA with an overview of the eligibility requirements of the existing transportation programs and the feasibility for subcontracting these services under one administrative umbrella).

3. Analyze needs for Rural Public Transportation beyond the special purpose programs.

Phase II. Development of a Regional Operations Plan

4. Define Service Area Goals

5. Develop Routing Plan and Schedules

6. Prepare System Cost Analysis

7. Develop System Revenue Projections

8. Identify Legal and Administrative Constraints to Rural Transportation

Phase III. Preparation of Promotions and Community Participation Plan

9. Identify Promotions Target Groups

10. Develop Specific Marketing Tools

11. Prepare Community Participation Plan

Phase IV. Preparation of Evaluation and Monitoring Plan

12. Establish System Rating Procedure

13. Develop Evaluation Procedural Guidelines

14. Prepare Annual Update Components

15. Evaluate Project Methodology.

OPERATIONS

Since the PDRTA has just begun service, figures on ridership and operating experience are not available. Estimates of demand in 1977 and 1980, based on 1975 population data and the experience of existing transportation providers in the region, have been made by the PDRTA's consultant, Stephen Carter and Associates. They are summarized in Tables V and VI.

TABLE V

TRIP DEMAND ANALYSIS - TRANSIT DEPENDENT POPULATION

County	Population 1970	Population 1975	% H.H. Increase	Est. H.H. 1975	H.H. > 65 y.o.a.	%	H.H. < $4,000	%	# H.H. Transit Depend.	%	Est. Daily Transit Depend. Person Trips[1] Demand	Est. Daily Person Trips By Trans. Providers	% of Demand	Est. # of Vehicles Current
Chesterfield	33,666	34,400	2.1	10,424	782	7.5	2,012	19.3	1,230	11.8	2,091	105	5.0	7
Darlington	52,602	56,100	6.2	17,000	1,292	7.6	3,842	22.6	2,550	15.0	4,335	165	3.8	15
Dillon	28,838	29,600	2.6	8,222	617	7.5	2,368	28.8	1,751	21.3	2,977	53	1.8	4
Florence	89,616	97,400	8.0	30,438	2,131	7.0	6,088	20.0	3,927	12.9	6,675	408	6.1	30
Marion	30,270	32,300	6.3	10,093	828	8.2	2,725	27.0	1,897	18.8	3,226	47	1.5	3
Marlboro	26,961	28,300	4.7	8,576	712	8.3	2,058	24.0	1,346	15.7	2,289	84	3.7	7
REGION	261,953	278,100	5.8	84,753	6,362	7.5	19,093	22.5	12,701	15.0	21,593	862	4.0	66

SOURCE: Stephen Carter & Associates

(1) Estimated daily household trip demand is based upon a national average of 1.7 daily trips per house with annual income less than $4,000 and no auto ownership.

TABLE VI

VEHICLE NEEDS ANALYSIS

County	Est. Daily Person Trips By Providers	Est. # of Existing Vehicles	Est. # of Vehicle Seats	Current Utilization Rate	Est. 1975 Person/Trip Demand	1977 Est. Assume 10% Capture (Daily Trips)	1977 Est.(1) # of Seats Needed	1980 Est. Assume 25% Capture (Daily Trips)	1980 Est.(2) # of Seats Needed
Chesterfield	105	7	68	1.5	2,091	209	70	523	131
Darlington	165	15	186	0.9	4,335	434	144	1,084	271
Dillon	53	4	53	1.0	2,977	298	99	744	186
Florence	408	30	412	0.9	6,675	668	222	1,669	417
Marion	47	3	33	1.4	3,226	323	107	807	202
Marlboro	84	7	68	1.2	2,289	229	76	572	218
REGION	862	66	820	1.1	21,593	2,161	718	5,399	1,425
							58 vehicles		104 vehicles

SOURCE: Stephen Carter & Associates.

(1) Assume utilization rate of 3.0 - average vehicle size = 12.4 seats

(2) Assume utilization rate of 4.0 - average vehicle size = 13.7 seats

The start of transit service by the RTA has been delayed by the problem of obtaining vehicle insurance at affordable prices. In the initial bidding for liability insurance, on three buses to be operated under contract to the Chesterfield-Marlboro Technical Education Center (TEC), only one company responded. They asked a premium of $3,200/bus/year, far more than the PDRTA could afford. For this reason, the service was terminated, the contract cancelled.

Due to federal regulations, the PDRTA cannot offer service to the general public until it acquires title to its own vehicles. Only agency program participants can be carried in agency vehicles operated by the PDRTA.

On December 1, 1976, the PDRTA began operating eight buses under a contract with the U.S. Department of Labor (CETA). These vehicles were covered by a binder from the state General Services Administration until the insurance problem could be solved. During the Christmas holidays, operations were suspended, but were due to resume early in 1977. Three more vehicles are expected to begin service to the Chesterfield-Marlboro and Darlington-Florence Technical Education Centers (TECs) early in 1977. The PDRTA has obtained insurance from the South Carolina Insurance Company. Annual premiums will run between $1089 and $1250 for the fleet. These low premiums are due to the fact that only agency clients are being carried. Service to the general public would raise the annual insurance cost to around $16,800.

On February 11, 1977, it was learned that the U.S. Department of Transportation had acquired title to the eight Department of Labor (CETA) buses and had turned them over to the PDRTA.[8] With the help of the offices of UMTA (Region IV) and HEW (Region IV), the titles were transferred to the U.S. Department of Transportation and thence to the South Carolina Department of Highways, and finally to the PDRTA, which will have the titles in hand in a couple of weeks. This would remove the restriction against carrying the general public in their vehicles, thus allowing the PDRTA to expedite service to the general public. As of this writing, no date had been set for the start of such service.

The PDRTA is applying for insurance relief through the South Carolina Reinsurance Facility. It is also working with the state legislature to obtain eligibility for no-fault or limited liability insurance which is available to other governmental entities.

As of January 31, 1977, the PDRTA had signed contracts for service with two more social service agencies and negotiations were underway with a third.

A contract has been signed with the Title XIX program of the South Carolina Department of Social Services to transport its clients in Marion and Dillon Counties. Service is to begin March 1, 1977.

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[8] Stephen Carter, telephone conversation, February 11, 1977

A contract has also been signed with the Title XX program in Mullins, South Carolina, to transport twenty to twenty-five elderly clients to nutrition centers. This service is also scheduled to begin March 1.

The PDRTA is negotiating with the state Board of Prisons to provide transportation for work-release prisoners to and from the Palmer Pre-Release Center.

As was stated in the "Introduction", the PDRTA's existence is predicated upon its operating and coordinating transportation services formerly provided by specialized agencies to their clients.

In most cases, ownership of the vehicles formerly operated by the agencies will be vested in the PDRTA. The vehicles will carry the PDRTA's colors and logo. However, the buses acquired from CETA will retain their CETA markings. The PDRTA in turn will be under contract to provide services to the clients and students of the various agencies and schools.

A second reason for the PDRTA's existence is the expansion of specialized transportation services to the general public. A problem arising from the PDRTA's commitment to serve both agency clients and the general public is the development of a ticketing and service charging system by which agencies can be charged fairly for services provided to their clients. One constraint is to develop a system that does not openly distinguish social service clients from the general public except for accounting purposes. Such a system must identify the following:

1. Person making trip
2. Trip purpose
3. Day of trip
4. Responsible agency
5. Amount to be paid.

At the time of this writing, a system for ticketing and accounting has been developed. Tickets have been printed, and the system is soon to be put into operation.

The PDRTA is not regulated by the State PSC by virtue of Bill # 417 that grants authorities the right to regulate themselves.

Problems of competition with, and possible challenges from private carriers have arisen. One private operator requested a license from the state Public Service Commission (PSC) to provide service to an area within the PDRTA's jurisdiction. Because the PDRTA is not now licensed by the PSC it was not notified of the private operator's application for a license, and learned of the application through a newspaper article. However, since the license was issued, the private operator has ceased operations due, reportedly, to high insurance costs and poor

ridership.[9]

The PDRTA is also considering providing a higher level of service on some routes currently being served by a major inter-city carrier. To avoid conflict the PDRTA is seeking a coordinated and cooperative service arrangement whereby "travel coupons" issued by the PDRTA will be honored for travel in the area by either carrier. The cooperation of the PSC and the carriers is essential for the success of this arrangement.

FINANCES

Estimated capital, operating and administrative expenses for the two years of the demonstration and for the first year after the demonstration are summarized in Table VII.

Because most of the vehicles to be operated by the PDRTA will be transferred from participating agencies, initial capital outlay is expected to be low for a system of the size projected. Major capital purchases during the first year are expected to include two 26-passenger buses, three 15-passenger vans, and a radio system with two transmitting units and fifteen two-way radios. As of this writing, bids have been received for the two buses, and the contract is to be awarded soon with delivery expected in ninety days.

By the second year of the demonstration, operating expenses are expected to approach $700,000, and exceed that figure in the first post-demonstration year.

FUNDING AND REVENUES

Estimated funding, including the Section 147 grant, and fare-box and other revenues for the two demonstration years and the first post-demonstration year are summarized in Table VIII.

The $200,000 Section 147 demonstration grant to the PDRTA provided $144,375 for the demonstration's first year and $55,625 for the second year. In addition to these funds, the PDRTA estimates that funding from other federal and state agencies will provide about $216,000 for each year of the demonstration.

It is estimated that once the system is underway, even a very modest portion of the potential ridership would yield approximately 330,000 trips annually.[10]

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[9] Stephen A. Carter, communication, February, 1977.

[10] Section 147 . . ., pp. 4, 95.

TABLE VII

Expenses	Year I	Year II	Year III
Operating - Operations	$21,615	$621,915	$645,795
Operating - Administrative	$43,060	$ 54,560	$ 60,900
Operating - Planning Monitoring Evaluation	$13,700	$ 3,500	$ 8,000
Total Operating	$78,375	$679,975	$714,695
Capital	$66,000	$23,500	—

Source: PDRTA Section 147 Proposal.

TABLE VIII

FUNDING Source	YEAR I	YEAR II	YEAR III
Section 147	$144,375	$55,625	N/A
Fares and Revenues			ca. $330,000-$500,000
Other Grants and Subsidies	ca. $216,000	ca. $216,000	ca. $216,000

Source: PDRTA Section 147 Proposal

At an average fare of $1.00, the PDRTA would receive about $330,000 annually from the fare box. Additional ridership from an estimated 395,000 trip-to-work potential demand could bring total fare-box income to over $500,000.

The PDRTA has received statements of commitment from regional agencies which indicate a strong potential for local subsidy. It is expected that such subsidy would compensate for any deficit in revenues.

SUMMARY

The Pee Dee RTA has been faced with difficulties and uncertainties which have delayed the startup of service. The problem of obtaining insurance coverage has already been discussed. Other problems remain to be solved in time. The Executive Director and his staff will continue to be assisted by Stephen Carter and Associates, consultants, and by the North Carolina A&T research team and others.

The PDRTA came into being because of the desire of public agencies to coordinate their transportation services, and the demand for a regionwide transportation system to serve the general public. The involvement and commitment of many public agencies has been summarized in Table IV, above. The system has rather strong political support and has received statements of commitment which indicate a strong potential for financial support as well.

Confidence in the PDRTA has been evidenced by the request of Williamsburg County to join the PDRTA. This county, south of Florence County, has been characterized as the "poorest" in the region, and the need for service as "desperate." Negotiations are planned.

Most important for the future success of the Pee Dee RTA is the mandate it has been given by the people and public agencies of the region. If that mandate can be translated into adequate pressure for cooperation and financial support for a coordinated regional public transportation system, the success of the PDRTA will be assured.

RURAL PUBLIC HIGHWAY TRANSPORTATION DEMONSTRATION PROGRAM
DATA INTAKE FORM 01
BASELINE PROJECT OBJECTIVES AND TARGET POPULATION

01 (1 2)

*Note: Completed Forms will be available In March, 1977.

Project Number: ___ (3 4 5)

Date: __/__/__ (6 7 8 9)

CARD NO. 01 (10 11 12)

1. Project Name: Pele Dele Regional Transportation Authority (13–48 / 49–80)

2. Sponsor Organization: 02 (10 11 12) (13–48 / 49–80)

03 (10 11 12)

2a. Type of organization sponsoring the S.147 project (CIRCLE ALL THAT APPLY)

- State Department of Transportation 13-1
- Other State governmental agency 14-1
- County government 15-1
- City or other local government 16-1
- Regional planning district of council of governments 17-1
- Transportation authority . . . . (18-1)
- Community Action Agency 19-1
- Indian Tribe 20-1
- Other (SPECIFY) _____ . . . 21-1

3. Project Objectives (Narrative): The objective of this project is to illustrate the cost, energy, and manpower savings which are possible through an optimization of available resources.

- Establish new service . . . . (22-1)
- Coordinate existing services . . . . (23-1)
- Expand existing services . . . . (24-1)
- Establish regional transit authority . . . (25-1)
- Organize volunteer services 26-1
- Plan 27-1
- _____ . . . 28-1
- Other 29-1

RURAL PUBLIC HIGHWAY TRANSPORTATION DEMONSTRATION PROGRAM
DATA INTAKE FORM 01 (continued)

01 (1 2)

Project Number: (3 4 5)

Date: (6) 1 (7 8) (9)

0 4 (10 11 12)

4. Operating Environment (Narrative):

(a) Terrain: Flat 1 (13-1)
Hilly 2
Mountains 3

(b) Temperature (°F)
Avg. High (14 15) Avg. Low (16 17)

(c) % of total vehicle mileage on unpaved roads (18 19)

(d) days per year of extremely adverse weather conditions (20 21)

5. Area served: Total population in project area: 263994 (22–29)

Area served in square miles: (30–34)

Service provided state-wide? Yes 1 (35-1)
No 2

Number of counties served: 6 (36 37 38)

List of counties served (by name)

Chesterfield	Marion	
Darlington	Marlboro	
Dillon		
Florence		

6. Does this project provide transportation to persons or goods (through direct operations, contracts, payments or other methods?) (IF NO, THE REMAINING QUESTIONS ON THIS FORM DO NOT APPLY)
Yes 1 (39-1)
No 2

7. Can any member of the general public in the service area use this service?
Yes 1 (40-1)
No 2
Eventually, but not at present.

RURAL PUBLIC HIGHWAY TRANSPORTATION DEMONSTRATION PROGRAM
DATA INTAKE FORM 01 (continued)

01 (1 2)

Project Number: ___ (3 4 5)

Date: __/__/__ (6 7 8 9)

8. What is the Unduplicated Number of Persons with Restricted Mobility in the Service Area? (13 – 19)

0|5| (10 11 12)

9. What is the Unduplicated Number of Persons Expected to Use the System Each Month? (see instructions) (20 – 25)

10. Is special attention given in the system's design or operations to the needs of any particular target group? Yes . . . . . (26-1) No . . . . . -2

(IF YES, FILL IN THE FOLLOWING DATA FOR EACH GROUP)

Special Target Population Groups	Persons in Area Served by Project	Number of Persons Expected to Use the System Each Month
10.1 Elderly	29800 (27–32)	(33–38)
10.2 Poor	74873 (39–44)	(45–50)
10.3 Minorities		
Black	55656 (51–56)	(57–62)
Oriental	(63–68)	(69–74)
0|6| (10 11 12) American Indian	(13–18)	(19–24)
Spanish	(25–30)	(31–36)
Other	(37–41)	(42–47)
10.4 Handicapped	17343 (48–53)	(54–59)
10.5 Social Service Agency Clients	(60–65)	(66–71)
0|7| (10 11 12) 10.6 Commuters & Workers	(13–18)	(19–24)
10.7 Youth	(25–30)	(31–36)
10.8 Others (SPECIFY) _____	(37–42)	(43–48)

RURAL PUBLIC HIGHWAY TRANSPORTATION DEMONSTRATION PROGRAM

DATA INTAKE FORM 02

PLANNED PROJECT CHARACTERISTICS

0	2
1	2

Project Title _____ Project Number: | | | | (3 4 5)

_____ Date: __ __/__ __ (6 7 8 9)

SERVICE

0	1	
10	11	12

1. Route Characteristics for the entire system: (CHECK all that apply)

Fixed Routes and Schedules, no deviations	13-1
Fixed Route with deviations (not more than 1/2 mile from route)	14-1
Fixed Schedules between points (no particular route)	15-1
Demand Responsive (no fixed routes or schedules)	16-1

*2. Total One-Way Route Mileage Each Month: (17 18 19 20)

*3. Overall Monthly Frequency of Service: (Frequency = Monthly Vehicle Miles ÷ One-Way Route Miles) times per month (21 22 23 24)

**4. Reservation Time in Advance: days (25) or hours (26 27)

5. Planned Monthly Vehicle Miles. (Total System) (28 29 30 31 32 33)

6. Planned Monthly Seat Miles. (Total System) (34 35 36 37 38 39 40 41)

7. Planned One-Way Monthly Passengers. (Total System) (42 43 44 45 46 47)

STAFF

8. Characteristics of Drivers:

Types of Drivers	Number of Drivers: Full Time	Part Time	Total
Volunteers	(48 49 50)	(51 52 53)	(54 55 56)
Salaried, Paid, and Contracted	(57 58 59)	(60 61 62)	(63 64 65)
Total	(66 67 68)	(69 70 71)	(72 73 74)

*Fixed route systems (or portions of systems) only

**Demand responsive systems (or portions of systems) only

RURAL PUBLIC HIGHWAY TRANSPORTATION DEMONSTRATION PROGRAM
DATA INTAKE FORM 02 (continued)
PLANNED PROJECT CHARACTERISTICS

0 2 (1 2)

Project Number: (3 4 5)

Date: ___/___/___ (6 7 8 9)

0 2 (10 11 12) 9. Fares: Is this transportation service provided for free to all passengers? (Yes) at present .13-1 / No . . -2

10. If no, please fill in the following information on one-way passenger fares:

One-Way Passenger Fares Charged	FLAT FARES: Dollars Per One-Way Passenger Trip $XX.XX	FLAT FARES: Average Cents Per Mile	GRADUATED FARES: Base Fare $XX.XX	GRADUATED FARES: Increment Per Mile (¢)	GRADUATED FARES: Average Fares Per Passenger Mile (¢)	Total Monthly Charges (If Applicable) $XX.XX
10.1 Regular Cash Fares with no Discount	(14 15 16)	(17 18 19)	(20 21 22)	(24 25)	(26 27)	(28 29 30 31)
10.2 Special Cash Fares with Discount	(32 33 34)	(35 36 37)	(38 39 40)	(42 43)	(44 45)	(46 47 48 49)
Shoppers	(50 51 52)	(53 54 55)	(56 57 58)	(60 61)	(62 63)	(64 65 66 67)
0 3 (10 11 12) Students	(14 15 16)	(17 18 19)	(20 21 22)	(24 25)	(26 27)	(28 29 30 31)
Elderly	(32 33 34)	(35 36 37)	(38 39 40)	(42 43)	(44 45)	(46 47 48 49)
Others (SPECIFY)	(50 51 52)	(53 54 55)	(56 57 58)	(60 61)	(62 63)	(64 65 66 67)
0 4 (10 11 12) _____	(14 15 16)	(17 18 19)	(20 21 22)	(24 25)	(26 27)	(28 29 30 31)
_____	(32 33 34)	(35 36 37)	(38 39 40)	(42 43)	(44 45)	(46 47 48 49)
10.3 Subscription Service/ Purchased Passes	(50 51 52)	(53 54 55)	(56 57 58)	(60 61)	(62 63)	(64 65 66 67)
0 5 (10 11 12) 10.4 Cooperative Service	(14 15 16)	(17 18 19)	(20 21 22)	(24 25)	(26 27)	(28 29 30 31)
10.5 Donations	(32 33 34)	(35 36 37)	(38 39 40)	(42 43)	(44 45)	(46 47 48 49)

10.6 Total projected monthly income from fares = average fare times number of passengers = $ (51 52 53 54 55)

11. Contracts, Grants, and Contributions from All Agencies

Names of Agencies and others providing contracts, grants and contributions (a)	Agency Code	Expected Monthly Contract Contribution/ Revenues $XX,XXX (b)	REVENUES CONTRACTED: Per Vehicle Mile $X.XX (c)	Per Passenger $XX.XX (d)	Per Passenger Mile $X.XX (e)	Per Delivery $X.XX (f)
Manpower Plan. + Coordination	(56 57 58)	$ 8,851 (59 60 61)	(63 64)	(65 66)	(67 68)	(71 72)
0 6 (10 11 12) D.C. Dept of Social Services	(13 14 15)	$ 8,281 (16 17 18)	(19 20)	(21 22)	(23 24)	(29 30 31)
Community Services Admin.	(32 33 34)	$ 5,228 (35 36 37)	(39 40)	(41 42)	(43 44)	(48 49 50)
HEW-Headstart	(50 51 52)	$ 3,685 (53 54 55)	(57 58)	(59 60)	(61 62)	(66 67 68)
0 7 (10 11 12) HUD-Section 147	(13 14 15)	$ 2,362,929 (16 17 18)	(19 20)	(21 22)	(23 24)	(29 30 31)
Total of other remaining agencies						

RURAL PUBLIC HIGHWAY TRANSPORTATION DEMONSTRATION PROGRAM
DATA INTAKE FORM 02 (continued)
PLANNED PROJECT CHARACTERISTICS

0 2 (1 2)

Project Number: (3 4 5)

Date: / (6 7 8 9)

12. Fleet Characteristics:

0 8 (10 11 12) 12a. Do you operate or plan to operate your own Transportation Service? (Yes) . . . . . 13-1 No . . . . . -2

12b. Provide the following information on all project vehicles (whether owned, leased, contracted, etc.)

VEHICLE FLEET CHARACTERISTICS

Vehicle Type (c)	Make & Model (d)	Special Features (e)	CODING BLOCK (DO NOT USE)	Quantity (f)	Year (g)	Number of Seats (h)
Auto _____			14 15 17	18 20	21 22	23 24
_____			25 26 28	29 31	32 33	34 35
_____			36 37 39	40 42	43 44	45 46
Station Wagon (5-9 seats)			47 48 50	51 53	54 55	56 57
_____			58 59 61	62 64	65 66	67 68
_____			69 70 72	73 75	76 77	78 79
0 9 (10 11 12) _____			14 15 17	18 20	21 22	23 24
Van/Mini Bus (10-16 seats)			25 26 28	29 31	32 33	34 35
_____			36 37 39	40 42	43 44	45 46
_____			47 48 50	51 53	54 55	56 57
Small Bus			58 59 61	62 64	65 66	67 68
(17-33 seats)			69 70 72	73 75	76 77	78 79
School Bus (less than 31 seats)			14 15 17	18 20	21 22	23 24
1 0 (10 11 12) (31 seats and above)			25 26 28	29 31	32 33	34 35
Transit Bus			36 37 39	40 42	43 44	45 46
(34 seats and above)			47 48 50	51 53	54 55	56 57
Other (SPECIFY) _____			58 59 61	62 64	65 66	67 68
_____			69 70 72	73 75	76 77	78 79
1 1 1 (10 11 12) _____			14 15 17	18 20	21 22	23 24

RURAL PUBLIC HIGHWAY TRANSPORTATION DEMONSTRATION PROGRAM

DATA INTAKE FORM 03

BASELINE AREA TRANSPORTATION SERVICE AVAILABILITY

0 3 (1 2)

Project Title: _____ Project Number: ___ (3 4 5)

Date: __/__/__ (6 7 8 9)

Types of Service (1)	AVERAGE MONTHLY OPERATING CHARACTERISTICS							
	Number (2)	Vehicle Miles (3)	Seat Miles (4)	One-Way Route Mileage (5)	One-Way Passenger Trips (6)	No. of Vehicles (7)	Fares Per Passenger Mile (8)	
1. Intercity Bus Service	2							
2. Buses only inside towns	1							
3. Taxis								
4. Social Service Agencies								
5. Others	1							

List of companies summarized above

Name (9)	Type (10)	Service (11)	Location (12)
Greyhound Lines, Inc.			
Continental Trailways			
Amtrak			

PLANNING SUMMARY
QUALLA PUBLIC TRANSPORTATION
SYSTEM

SYSTEM IDENTIFICATION

Qualla Public Transportation System
Qualla Indian Boundary Projects
Office of Native American Programs
P.O. Box 427
Cherokee, N.C. 28719
(704) 497-9315

Mr. Ralph N. Henry, Director
Mr. Samuel R. Spangenberg, Program Planner

Date of Site Visitation: August 25-26, 1976

Funding: 1970-1975 -- Community Action
OEO Program
Tribal Funds
Passenger revenues

1976 -- Section 147

Date Started: 1970

Number of Vehicles: One 26-passenger bus
One 19-passenger bus
One 16-passenger van

Area Served: Qualla Tract of the reservation of the Eastern Boundary of Cherokee Indians, Haywood, Swain, and Jackson Counties and Cherokee, Sylva, Bryson City, and Waynesville, N.C.

Clientele Served: Clientele of social service agencies and the general public in the area served.

SYSTEM SUMMARY: The Qualla Public Transportation System, a Section 147 Demonstration Program, is a fixed-route, fixed-schedule rural transportation system serving the residents of the Qualla Tract of the reservation of the Eastern Band of Cherokee Indians (EBCI) in Swain and Jackson Counties. The service was started in 1970 to provide local residents with low-cost, reliable transportation to and from work and for necessary daily activities such as shopping or obtaining health and social services.

were considered "more or less" easy to follow, but "evaluation" was poorly defined in the guidelines. Thus, when evaluation guidelines were defined by FHWA in April, 1976, they were more detailed than most systems expected and had budgeted for. (FHWA has subsequently told projects they may request additional funding.)

No major policy or regulatory problems were experienced during the planning process. This is partly because it is an Indian Reservation, the service is similar to existing services, and the state regulatory commission was informed of the proposals prior to new service.

A suggestion was made by the Program Planner to the Q.I.B.P. that special state license plates be used on the system's vehicles, but the decision was made to keep the OEO plates.

GENERAL ASSESSMENT OF THE SYSTEM

The overall planning process was carried out informally. Planning was directed not at creating a new system, but at improving an existing system that had demonstrated its usefulness.

The potential for system success is high. The replacement of the original, badly deteriorated vehicles with new equipment under the Section 147 grant has improved the reliability of service, increased ridership, and improved the system's image.

Three industrial firms have shown an interest in locating in Cherokee. They indicated that their interest was prompted in part by the availability of reliable public transportation. While none has made a final commitment, it is evident that the Public Transportation System can favorably influence the potential for employment in the area.

By replacing the original two buses with three new vehicles the system became more flexible and is able to provide transportation to areas outside the reservation. This has offered reservation residents a greater choice of shopping sites and access to lower prices in surrounding communities. The new system also offers reservation residents better access to health and social service facilities.

The negative impacts of the new system have been minimal or nonexistent. The local taxi operator has not indicated any loss of business. Retail businesses on the reservation likewise have experienced very little if any loss of business, in spite of the increased accessibility of competing businesses in communities outside the reservation.

The new vehicles are better adapted to road conditions than the original school buses, and still have sufficient capacity to meet the demand. The system continues to run on fixed routes and schedules. Two vehicles provide service between Cherokee and the Big Cove and Big Y-Soco communities. Morning and evening runs are coordinated with the working hours of industries in Cherokee, and a mid-day run serves shoppers and clients of health and social service agencies.

The third vehicle provides service outside the reservation, between Cherokee and the nearby towns of Bryson City, Sylva, and Waynesville.

OVERVIEW OF PLANNING

The Qualla Indian Boundary Projects (Q. I. B. P.) acted as the lead agency in planning the new system. Social service agencies and elected officials (the Tribal Council) were approached and local citizen input was solicited through letters and newspaper announcements and advertisements. The Sheltered Workshop worked with the Q. I. B. P. as a potential contributor during the period prior to writing and prior to funding of the proposal.

A preliminary proposal was submitted in December, 1974, to the N. C. Division of FHWA for review with a request for suggestions as to the format and content of the proposal. (The 'guidelines' were not published until April, 1975.) Although not a requirement because it is an Indian project, a copy of the proposal was sent to NCDOT for review and comments. This was mutually beneficial. The early communication and cooperation between the project and the State DOT and FHWA agency resulted in technical assistance when needed and is expected to result in funding assistance after the demonstration.

Interviews were conducted to assist in planning the system. The transportation needs of individuals were assessed by determining the residential patterns and location of services, employers, businesses, etc. Most of the transportation needs of health and social service agencies, Headstart, etc., were already being met by existing transportation.

No formal advisory committee was created to give input during the planning process. Rather, there was constant communication on a one-to-one basis with individuals, businesses, agencies, and the Tribal Council, as well as communication via the media to others. The discussions sought advice and input as well as support for the Section 147 demonstration program. The specific planning activities that occurred are summarized in Tables I and II in the Appendix and discussed next.

PLANNING PRIOR TO SUBMISSION FOR SECTION 147 FUNDING

Prior to submission of the proposal, the planning process involved determining community needs, and drawing up an estimate of budgeting requirements. The planner of the EBCI's Office of Native Americans contacted businesses, agencies, and individuals before writing the preliminary proposal.

PLANNING AFTER SUBMISSION OF PROPOSAL

The preliminary proposal was submitted two months before the 'guidelines' were published and almost six months prior to the deadline for submitting proposals. This early submission enabled the EBCI to receive comments from FHWA and NCDOT, to continue to gain local support and to secure local commitments for the proposed system. (Other agencies and systems typically had less than two months from the time they heard about Section 147 until the submission deadline.)

After submission of the proposal and prior to notification of funding, planning was carried out in several areas. Population and economic data were already available in a comprehensive report published in 1974.* On the basis of these data and current interviews, existing transportation sources and needs were identified and assessed to determine unmet travel needs and to estimate demand for the proposed system. Public participation was solicited and goals and objectives were developed. The planning was coordinated with local government, NCDOT, and the FHWA. Also, the state regulatory agencies and public utilities commission were contacted. Cost and revenue estimates were made and financial resources for the period beyond Section 147 funding were assessed. Future needs and impacts of the system were estimated, in particular the impact on other existing transportation providers in the area.

The preliminary proposal called for a radio-dispatched, demand-responsive service. However, because of the additional costs in personnel and equipment necessary for such a service, the preliminary

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*Eastern Band of Cherokee Indians. Comprehensive Plan -- Vol. I; Population and Economy Study, Eastern Band of Cherokee Indians. Raleigh, North Carolina, North Carolina Department of Natural and Economic Resources, Division of Community Services. July 22, 1974.

proposal was amended to provide for a fixed-route, fixed-schedule service, similar to that provided by the existing system.

On the basis of planning and consultation with the state, EBCI changed the format of its proposal and made other minor amendments to conform with the final Section 147 guidelines.

PLANNING: POST NOTIFICATION OF FUNDING

The EBCI learned in September, 1975, that its proposal had been funded. During the interval between notification of funding and the start of service in June, 1976, the proposal was publicized in newspapers and on radio. Residents were asked for input on the detailed planning of the demonstration program. Care was taken not to make any statements concerning the starting date or the routes and schedules to be offered, (which might raise expectations that could not be met).

In April, 1976, the Program Planner, Sam Spangenberg, attended a FHWA-sponsored meeting held to review data collection and evaluation guidelines for the Section 147 projects. Some project managers suggested alternative data collection forms. After the meeting he submitted forms that would simplify reporting procedures. Some of his ideas were included in a revised draft of the evaluation guidelines.

Also, during this period a public meeting was held on the reservation, as required by the FHWA. The meeting was attended by the representatives of the state office of the FHWA and the NCDOT, a representative from the Tribal Council of EBCI, Q.I.B.P.'s Program Planner and six citizens.

COOPERATIVE ARRANGEMENTS

Larger employers of the reservation were contacted to coordinate transportation service with the starting and ending times of shifts, to provide more effective transportation for work trips, which are the major type served by the system.

OVERVIEW OF PROBLEMS IN PLANNING

In response to questions concerning problems in the planning process, Q.I.B.P.'s Program Plannger stated that difficulties were encountered with the evaluation/interview requirements of FHWA/DOT and with the reporting forms. The Section 147 application guidelines

were considered "more or less" easy to follow, but "evaluation" was poorly defined in the guidelines. Thus, when evaluation guidelines were defined by FHWA in April, 1976, they were more detailed than most systems expected and had budgeted for. (FHWA has subsequently told projects they may request additional funding.)

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Three industrial firms have shown an interest in locating in Cherokee. They indicated that their interest was prompted in part by the availability of reliable public transportation. While none has made a final commitment, it is evident that the Public Transportation System can favorably influence the potential for employment in the area.

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The negative impacts of the new system have been minimal or nonexistent. The local taxi operator has not indicated any loss of business. Retail businesses on the reservation likewise have experienced very little if any loss of business, in spite of the increased accessibility of competing businesses in communities outside the reservation.

There is and will continue to be a strong tribal commitment to the Public Transportation System. The Tribal Council continues to find ways to increase service to communities on the reservation not now served. The Q.I.B.P. currently has commitments of $10,000 annually to the System. This is expected to continue and possibly increase after the Section 147 demonstration period. Additional funding from the NCDOT is now being negotiated.

The Principal Chief of EBCI, John A. Crowe, and the Tribal Council realize that reliable public transportation will attract more industry, and therefore more employment (especially year-round employment). This will inturn increase incomes and help improve the quality of life for residents of the Cherokee reservation.

Appendix

Table I — Planning Activities
Before Submission, After Submission, After Funding

Table II — Profile of Agency, Governmental and
Business Involvement

Baseline Data
Special Information
FHWA Baseline Data Forms

Table I

Planning Activities

Activities	Before Application (Man Hours)	After Application (Man Hours)	After Notification (Man Hours)
a. form a planning committee	X		
b. identify existing transportation sources	X	X	
c. assess existing transportation services to determine unmet travel needs and to estimate demand for new system	X	X	
d. collect and analyze population and economic data	X		
e. solicit citizen participation	X	X	
f. develop goals and objectives	X	X	
g. coordinate planning with local government and local, state, and federal agencies	X	X	
h. contact regulatory agencies, i.e. public utilities	X	X	
i. assess financial resources for period beyond Section 147 funding	X	X	
j. perform cost and revenue estimates	X	X	
k. develop type of service options (fixed-route, dial-a-ride)	X	X	
l. develop scheme for implementing service	X	X	
m. estimate future needs and impacts			
1. impacts on existing transportation providers	X	X	
2. impacts on outlying rural businesses (i.e. closing of country stores due to people shopping in town	X		
3. impacts on agriculture due to access to jobs	X		
4. negative impacts on new system due to riders buying cars upon receiving jobs			
n. review documents and literature			

Table II

Profile of Agency, Governmental, and Business Involvement

GROUP	NATURE OF INVOLVEMENT	COMMITMENT
EBCI Tribal Council	Planning and support	$10,000/year beyond Sec. 147
Local Community Action/Planning Agency (CAP)	Planning	
NCDOT	Advisory	Funding to be negotiated
NC Regulatory Commission	Consulted	
Local taxi operators	Consulted re impact on business	
Local employers	Consulted re trip scheduling	
Sheltered workshop	Advisory	

SPECIAL INFORMATION, used in developing baseline data for Qualla Public Transportation System

Big Cove Route: 26 pass. veh., 13.5 miles one way, 3 trips per day 22 days per month, average estimated ridership 30 pass. per day (25 paying, 5 senior citizens free) 27 deadhead miles daily, 4 miles unpaved daily

Soco Route: 19 pass. veh., 18 seated, 1 wheelchair, 19 miles one way, 2 trips per day, 22 days per month, average estimated ridership 15 pass. per day (10 paying pass., 5 senior citizens free) 38 deadhead miles daily, 6 miles unpaved daily

Sylva Route: Mondays and Thursdays, 16 pass. veh., 24 miles one way, 2 trips per day 2 days per week, average 9 days per month, average estimated ridership 5 pass. per day (3 full fares, 2 senior citizens at $\frac{1}{2}$ faire) no deadhead, no run without pass. from Cherokee

Bryson City: Tuesdays and Fridays, 16 pass. veh., 17.5 miles one way, 2 trips per day 2 days per week, average 9 days per month, average estimated ridership 5 pass. per day (3 full fares, 2 senior citizens at $\frac{1}{2}$ fare) no deadhead, no run without pass. from Cherokee

Waynesville: Wednesdays, 16 pass. veh, 29 miles one way, one trip per day, one day per week, average 4 days per month, average estimated ridership 5 pass. per day (3 full fares, 2 senior citizens at $\frac{1}{2}$ fare) no deadhead, no run without pass. from Cherokee

All monthly data based on 22 operating days per month

All information as to trips to Sylva, Bryson City and Waynesville must be viewed as two one way trips for each round trip fare. This is important when filling out 05 form on passenger trips, and other places where half of the travel is bringing people 'home'.

Qualla Indian Boundary Projects
Community Action Program
OFFICE OF NATIVE AMERICAN PROGRAMS
P. O. BOX 427, CHEROKEE, N. C. 28719
PHONE (704) 497-9315

RALPH N. HENRY
PROJECT DIRECTOR

November 12, 1976

Mr. John Gilbert
Federal Highway Administration
P,O,Box 26806
Raleigh, North Carolina

Dear John:

Enclosed are the Baseline forms for our project, the October forms for the project, the Quarterly narrative, and Monthly Expenditure report.

In completing the enclosed I notice several problems in their design which you will, perhaps, wish to pass on to the Regional Office. These items are listed seperately on an enclosed sheet of paper.

I am also using a modification of my origional form for the daily form which meets all of the needs for filling in the monthly forms and is a bit shorter for the drivers. I am also still anxious about the use of that *!@# interview form even though Doug Mc Kelvey has indicated that he has requested some additional funds to give us a hand. I appreciate it, but still have serious reservations (quaint and origional use of the word) about the benefits in annoying the riders.

Stay well and I hope to see you in Atlanta.

Sincerely,

Samuel R. Spangenberg

Data Intake form 02 second page: Item o/2/10.1

Each route would require a similar page (category lo.1) of information if a different amount of fare is charged or if a differnet average mileage is involved or if different routes offer different discounts to special groups.

Data Intake form 02 second page: Item 0/2/10.1

The column (spaces 28,29,30,31) Total Monthly Charges would also be different for each vehicle/route/fare combination. Example also indicates that the information given here must be $99.99 or less to be entered. This could be more easily rounded to the nearest dollar.

A number of the information categories are not mutually exclusive sets and statisticians should be wary of how figures for poor, elderly, handicapped and similar 'groups' are calculated in arriving at comparative information.

PLANNING SUMMARY

APPALACHIAN OHIO REGIONAL TRANSIT ASSOCIATION (AORTA)

A. SYSTEM IDENTIFICATION:

Appalachian Ohio Regional Transit Association (AORTA)
64 North Court Street
Athens, Ohio 45701
(614) 592-3081

Key Personnel:

Mr. Charles W. Algeo, President, Board of Trustees
Mr. David Vaughan, Executive Director
Mr. Val Strimbu, General Manager
Mr. Brian Noble, (President, Enterprises Unlimited Corp.), Consultant

Date Started: December 1, 1971

Vehicles:	Number	Capacity (Passengers)
	10	21
	5	30 (on order)
	2	16 (on order)

Employees: 21

Area Served:

Athens, Hocking, Perry and Vinton counties, and the City of Athens, Ohio; Service planned for Gallia, Jackson and Meigs counties.

Clientele Served: The elderly and poor and the general public.

Costs:

As of September 30, 1976:

Average per passenger	$1.40
Average per mile	.78
Average per hour	11.72

Funding, Sources and Amounts: See Appendix, Table III

B. SYSTEM HISTORY

The Appalachian Ohio Regional Transit Association (AORTA) was started as a rural transportation demonstration project by the Tri-County Community Action Agency (CAA) of Athens, Hocking and Perry counties, Ohio. Operations began on December 1, 1971, in Hocking County, with a 1963 model school bus acquired from GSA and driven by "mainstream" enrollees of the CAA.

AORTA has since expanded its fleet size and currently provides fixed-route rural service in Athens, Hocking and Vinton counties. Each county system operates one bus, varying routes on different days of the week. One of the Hocking County routes also provides service to the county seat of Perry County. Each county provides funds (e.g., CETA, revenue-sharing) for one full-time driver's salary.

AORTA also operates three bus routes in the City of Athens. This system serves the public, including some 13,000 students at Ohio University. It is supported by fares, augmented by a subsidy from the city.

On November 22, 1976, AORTA began "Reserve-a-ride," a demand-responsive service in Athens County. "Reserve-a-ride" requires reservations two days in advance, and is designed to provide door-to-door service to welfare recipients and senior citizens, offering transportation at least once weekly into the City of Athens for shopping trips and essential services. "Reserve-a-ride" has enabled AORTA to revise or in some cases eliminate fixed-route service to areas where service demand is low.

The Section 147 program will enable expansion of service in June 1977 into Gallia, Jackson, Meigs and Vinton counties. AORTA also provides special commuter services, bus leasing, small group charters, and speical-event service.

AORTA's funding has come from the Office of Economic Opportunity and the Appalachian Regional Commission; from subsidies from state, county and city governments (State Elderly Bus Fare Assistance Program and general revenue sharing), and from contracts with local social service agencies (Title XX, Title VII, CAA) and with the City of Athens.

AORTA learned of the Section 147 program through its consultant, Brian Noble, in 1973. Prior to learning of Section 147, AORTA had investigated funding from Welfare, Title XX, the Appalachian Regional Commission, the Office of Economic Opportunity, revenue sharing, and UMTA capital grants.

As stated above, Section 147 funding will enable the system to expand its services. However, had the Section 147 proposal not been funded, AORTA would have continued to plan and to seek other sources of funding necessary to continue the system.

C. OVERVIEW OF PLANNING

Much of the technical planning for the Section 147 program was done by Mr. Brian Noble, President of Enterprises Unlimited Corp., whose services were funded through the Appalachian Regional Commission.

AORTA solicited participation from the general public in the planning through meetings held in different geographic areas of the region. These meetings were announced in local newspapers and by letters distributed to target groups. Participation in the planning process by citizens' groups, public agencies and federal, state and local governments was also sought. Those which participated are listed in Table II, and the role played by each is summarized.

An ad hoc committee to solicit long term commitment was created. It included more than twenty representatives from social service and community action agencies, local government, the Jackson County Council of Churches, and potential users.

Prior to writing the proposal, a number of local community and social service agencies helped to identify transportation needs and existing transportation resources in the area. These agencies included local community action agencies, agencies on aging, welfare departments, retired senior volunteer programs, and 169 and 648 boards (boards appointed by County Commissioners to allocate and monitor state and federal funds for mental health and retardation programs).

Representatives of business and employers also participated in sessions with ad hoc planning committees. The data from these meetings were used to estimate business and employer transportation needs. According to AORTA's management, the ad hoc committee meetings and other groups contacted provided the most accurate estimate of transportation needs.

AORTA also has a policy-making Board of Trustees. This Board received input from representatives of elderly, poor and handicapped citizens.

The Appalachian Regional Commission was asked for and provided assistance in the planning process. Total planning costs were about $12,000.

The planning methodology included determining individual transportation needs by means of surveys, information supplied by social service agencies on clients' needs, and meetings with groups of administrators in each of the counties.

A survey of the counties was undertaken in the winter of 1975-1976 by Dr. Richmond, a professor of marketing at Ohio University. The result will aid in planning AORTA's routes and schedules.

D. PLANNING PRIOR TO APPLICATION FOR SECTION 147

AORTA's Executive Director, David Vaughan, stated that four months was "enough" to prepare the 147 proposal. However, six months would have been better. The fact that AORTA was an operating system with experience made this task easier.

Planning activities carried out prior to submission of the proposal are summarized in Table I. The most time-consuming activities during this period were:

1. Assessment of financial resources for the period beyond Section 147 funding (200+ man-hours).
2. Planning (100+ man-hours).
3. Routing and Scheduling (100+ man-hours).
4. Promotion (50+ man-hours).

Problems encountered during this intial phase of the planning process included identifying local cash resources and gaining commitments of local government support.

E. PLANNING AFTER SUBMISSION OF PROPOSAL

After submitting the proposal, and prior to notification of funding, AORTA's management spent most of its time identifying financial resources for the period beyond Section 147 funding. Other planning activities, such as routing and scheduling, continued during this period. These are summarized in Table I.

No major problems developed during the period between proposal submission and notification of funding.

F. PLANNING AFTER INITIAL NOTIFICATION OF FUNDING

AORTA was notified in September, 1975, approximately three months after submission, that its Section 147 proposal had been preliminarily selected for funding. The most significant activity after notification was promotion. Other important planning activities included:

1. Continued assessment of financial resources for the period beyond Section 147 funding (100 man-hours).
2. Estimating costs and revenues (50 man-hours).
3. Developing type-of-service options (50 man-hours).
4. Developing plans for implementing service (40 man-hours).

In general, planning activities during the post-notificaton period were a continuation of activities begun earlier. These are summarized in Table I.

Final notification of funding was made in March, 1976, after a successful public hearing.

G. COOPERATIVE ARRANGEMENTS

As stated above (Section C, Overview of Planning,) local community action agencies, agencies on aging, welfare departments, retired senior volunteer programs and 169-648 boards contributed to the planning process. They identified transportation needs and resources. Participation of these and other agencies, such as the Appalachian Regional Commission and the Ohio DOT, and their involvement, are summarized in Table II.

An important factor in encouraging cooperation of county governments with AORTA is the State Elderly Bus Fare Assistance (SEBFA) Program. Through this program the state allocated to the counties a total of $2 million based on $0.35 per capita of total population. This money was to be used to support public transportation that was providing service to the elderly. Since AORTA is a public transportation system, this program enabled and encouraged the counties in AORTA's service area to support the system sooner than they might otherwise have done. To date, AORTA has received $32,000 of SEBFA funds. In turn, it must provide service to the elderly during all hours of service, for at least 15¢ less than the regular fare.

The SEBFA program was inaugurated October 1, 1975, to run for 58 weeks, and was later extended by 12 weeks. At this writing, there are indications that the state legislature may continue the program in the next biennium.

AORTA has contracted to provide bus service for the Tri-County (Athens, Hocking and Perry) CAA and the Athens County Welfare Department. The Vinton County Commission on Aging has arranged to pool and share resources with AORTA.

AORTA operates three routes for the City of Athens on an annual contract basis. In calendar 1976 AORTA charged the city $8.75 per vehicle hour, less fares collected. In 1977 the charge has been increased to $9.33 per vehicle hour. In 1976, the city authorized $40,000 of general Revenue Sharing funds to subsidize the three routes. State Elderly Bus Fare Assistance funding augmented fares collected to keep the city's share at $40,000.

AORTA has arranged with the City of Athens for bulk gasoline purchase. The cost to AORTA is about 44 cents per gallon. AORTA's average cost for all gasoline is about 50 cents per gallon.

Sources of financial support for the period beyond Section 147 funding are expected to include (but are not limited to):

1. City of Athens.
2. County Commissioners - CETA.
3. Title XX.
4. Title VII and Title III of AOA.
5. State Elderly Bus Fare Assistance.
6. In-kind contributions.

7. Earned Revenues
   a. Fares
   b. Charter revenues
   c. Advertising revenues

H. OVERVIEW OF PROBLEMS DURING PLANNING

AORTA's Executive Director stated that there were no problems in interpreting the Section 147 guidelines, but that other minor problems had arisen from considerations overlooked or not included in the planning process. Among these are the following:

1. As stated above (Section D, Planning Prior to Application), problems encountered in the planning period before submission of the proposal included obtaining commitments of local government support and identifying existing local transportation resources and local cash resources.

   No major problems were encountered in the interim between submission of the proposal and notification of funding.

2. Clearly, more time to prepare the Section 147 proposal would have been preferred.

3. In the regulatory area, the Ohio Public Utilities Commission (PUCO) Certificate of Public Convenience and Necessity required circumvention. AORTA, like other systems, needs the flexibility to change fares, schedules and routes without a time-consuming public hearing or the cost of a lawyer or representative. PUCO generally does not regulate systems financed with public funds. AORTA also argued that it is a public non-profit organization, not a service for hire or a common carrier, and therefore not subject to PUCO regulation.

   PUCO has approved the operation of AORTA as long as the corporation exists as a public non-profit organization. As such, AORTA is not regulated by PUCO except with respect to safety standards and practices and the maintenance of a minimum level of insurance.

I. GENERAL ASSESSMENT OF SYSTEM

The process of planning for AORTA's participation in the Section 147 program was relatively free of problems, due in part to the fact that a system was already in operation and that expansion was being planned befor AORTA learned of Section 147.

The process included participation by a large number of social service and government agencies, and businesses, many of which had already been cooperating with AORTA.

This cooperation and the prospect of its continuation are the best

indicators of the AORTA system's potential for success. Other important factors are:

1. AORTA's contracts with the various social service agencies.
2. Control by AORTA over the entry of new transportation providers and vehicles into its service area.
3. AORTA's continuing ability to provide charter services.

A stated objective of AORTA is the establishment of rural public transportation as a "self-sufficient, permanent feature of southeastern Ohio." The AORTA proposal stated that earned and contracted receipts were expected to cover 60 percent of the system's operating expenses by the end of the first funding year, with 75 percent recovery expected by the end of the second year and the break-even point to be reached by the end of the third year.

Expansion of AORTA's routes under the Section 147 project, and increasing contracts with industry, are expected to create additional ridership and spread administrative costs over a larger total budget. Currently, administrative costs represent about 27 percent of the system's total expenditure.

AORTA realizes that dependence on federal operating subsidies for continued funding is unrealistic. There are no continuing federal DOT operating assistance programs. AORTA must continue to promote coordination and obtain funding from local and state levels to survive.

APPENDIX

TABLE I. - PLANNING ACTIVITIES

ACTIVITY	MAN-HOURS SPENT		
	Before Application	After Application	After Notification
A. Formed a planning committee		40	
B. Developed goals and objectives	25+	40	
C. Collected and analyzed population and economic data	50+	30	
D. Identified existing transportation sources	50+	50+	30
E. Assessed existing transportation services to determine unmet needs and estimate demand for new system	50+	40	
F. Estimated costs and revenues	50+		50
G. Assessed financial resources for period beyond Section 147 funding	200+	100+	100
H. Solicited citizen participation		10	20
I. Coordinated planning with local government and local, state and federal agencies	50	50	50
J. Contacted regulatory agencies, e.g., Public Utilities Commission	20	10	
K. Developed type-of-service options	10		50
L. Planned routes and schedules	100		
M. Developed plans for implementing service	40+		40+
N. Promotion	50+		
O. Estimated future needs and impacts:			
1. On existing transportation providers			
2. On outlying rural businesses (e.g., closing of county stores due to people shopping in town	10		
3. On agriculture due to access to jobs			
4. Negative impact on new system due to riders buying cars upon getting jobs			
P. Reviewed documents and literature	40		20

APPENDIX

TABLE I. - PLANNING ACTIVITIES

TABLE II

AGENCY, GOVERNMENTAL AND BUSINESS INVOLVEMENT

Group or Organization	Nature of Involvement	Financial Commitment
Appalachian Regional Commission	Funded consultant; assisted in planning; subsidy	$72,772 (1974-75)
Ohio Valley Regional Planning Commission	Technical assistance	2,000
Buckeye Hills - Hocking Valley Regional Development District	Technical assistance	2,000
Tri-County (Athens, Hocking, Perry) Community Action Agency (CAA)	Original AORTA sponsor. Helped assess client travel needs and available transportation resources. Contracted for bus service	
Jackson-Vinton CAA	Administrative operations	1,000 - 2,000
Gallia-Meigs CAA	Administrative operations	3,000 - 4,000
Gallia-Meigs-Jackson-Vinton County Commissioners	Drivers' salaries	20,000 (ETA)
City of Athens	Contracted for bus service. Arranged for bulk gas purchase Provided storage	60,000 (1973-76)
Commission on Aging	Pooled and shared resources	
Agencies on Aging	Helped assess needs and resources	5,000 (Title VII)
Welfare Departments	Helped assess needs and resources. Contracted for bus service.	20,000 (Title XX)
Retired Senior Volunteer Programs	Helped assess needs and resources	
169 and 648 Boards	Helped assess needs and resources	
Jackson County Council of Churches		$ 2,500
Business and employers	Participated in planning	

TABLE III

FUNDING SOURCES

Source	FISCAL YEAR 1973	1974	1975	1976
Federal and State				
U.S. D.O.T. (Section 147)				6,280
Appalachian Regional Commission		37,772	35,000	34,906
Office of Economic Opportunity	23,000			
Ohio Department of Economic and Community Development		600	1,200	
Counties and Cities				
Tri-County Community Action Agency (OEC)			3,698	
(inkind)	10,000		967	
Athens County (Revenue sharing)	2,500	4,833	3,455	
Hocking County (Revenue sharing)			4,832	
(Emergency Employment Act)	5,000	7,587		
City of Athens (Revenue sharing)	2,500	8,763		
(inkind)			1,705	
CETA and inkind				18,800
Title XX				1,032
Earned				
Fares		15,517	18,709	28,840
Contract Services (includes $40,000 from City of Athens/Revenue sharing in FY '76)		1,376	27,801	60,690
Charter Services		2,338	7,815	11,261
Advertising Revenues		2,081	1,718	3,207
Leasing				1,570
Accounts receivable (charters and contracts)			20,049	
Total earned	4,000	21,312	76,092	105,568
Depreciation reserves				7,858
Total, all sources	47,000	80,867	126,949	174,444

PLANNING SUMMARY

PROGRESS FOR PEOPLE HUMAN RESOURCE AGENCY (HRA)

A. SYSTEM IDENTIFICATION

Progress for People Human Resource Agency (HRA)
P. O. Box 62
Dunlap, Tennessee 37311
(615) 949-2191

KEY PERSONNEL

Mr. Don Denton, Executive Director
Mr. Billie Harmon, Transportation Director

DATE STARTED: November, 1974
(Section 147 service began June 15, 1976)

VEHICLES:	Number	Passenger Capacity
Operating:	1	20
	1	15
	26	12
On Order:	7	16 (2 with hydraulic lifts)
	4	12
	39	

EMPLOYEES: 4 Administrative (1 Director, 1 Assistant, 1 Fiscal Officer, 1 Secretary)
37 Full-Time Drivers
10 Full-Time Dispatchers
10 Back-up Drivers (part-time)

AREA SERVED: Bledsoe, Bradley, Grundy, Marion, McMinn, Meigs, Polk, Rhea, and Sequatchie Counties, and Hamilton County (except Chattanooga), Tennessee

CLIENTELE SERVED: The elderly, handicapped, and poor; school children, and the general public.

FUNDING, SOURCES AND AMOUNTS: See Appendix, Table III

SYSTEM SUMMARY

The Progress for People Human Resource Agency (HRA) provides transportation for the elderly, handicapped, poor, children and the general public of a ten-county region in southeastern Tennessee. The riders are rural residents traveling within their county for social service, educational, shopping, employment and general purposes, and across county lines for medical trips.

B. SYSTEM HISTORY

The Progress for People Human Resource Agency (HRA) was originally funded in 1964 by the U.S. Office of Economic Opportunity, now the Community Services Administration (CSA). The HRA's original functions were primarily community organization, outreach services, and social services delivery.

Transportation was added to the HRA's activities in November, 1974. It had become increasingly difficult to deliver the HRA's other services because of lack of adequate transportation. In particular, the Headstart Program and services for the elderly demanded a well-organized transportation system. These programs could not function well with volunteer drivers or transportation provided by caseworkers in their personal cars.

Transportation Services Prior to the Demonstration

The HRA's transportation services began with five vehicles, funded by the Administration on Aging (AOA), to serve nine counties. Three roving dispatchers traveled in advance to the counties to schedule riders on the appointed days in each county (e.g., Tuesday and Friday each week in Bledsoe County). With the tacit consent of AOA, HRA began immediately to provide transportation for as many residents as possible, regardless of age, though the elderly were given priority. This experience facilitated the development of a coordinated transportation system in the area. Improved transportation has in turn improved program and service delivery to the disadvantaged as well as the public.

Prior to the Section 147 demonstration, the HRA's fleet had expanded to seventeen vehicles. These were used for a variety of transportation services. In addition, the HRA operates thirteen vehicles for Headstart exclusively. The Headstart vehicles are not included in the system's total.

Objectives and Service Characteristics of the Demonstration

Under the Section 147 program, eleven twelve-passenger vans are on order, as are two sixteen-passenger Pacemaker buses, which are to be equipped with hydraulic lifts for wheelchairs. Five additional Pacemakers are expected to be obtained with 16(b)2 funding.

The HRA's service objectives during the Section 147 demonstration include:

1. Demonstration of the comparative effectiveness of a demand-responsive system which gives priority to requests based on

trip destination rather than personal eligibility.

2. Measurement of the impact of radio communication on the effectiveness of rural transportation delivery.

3. Demonstration of increased non-ambulatory ridership.

4. Determining the feasibility of transporting rural commuters to urban areas for employment purposes.

5. Assessing the effectiveness of a taxi subsidy program for the elderly and handicapped. The HRA believes that some trip purposes, especially for the elderly and handicapped, are most effectively served by taxis, but the cost of unsubsidized trips is prohibitive for most individuals. The HRA also hopes to coordinate the taxi program with the 12-passenger van demand-responsive system.

6. Demonstration of the usefulness of a computer tracking system to improve the management, monitoring, evaluation and planning of rural transportation services.

The HRA learned of the Section 147 program through the State Community Development Coordinator, in February or March, 1975. Prior to learning of Section 147, the HRA had investigated funding from the CSA, the Commission on Aging (COA), the Tennessee Department of Transportation (DOT), and the Regional Medical Program.

The Section 147 demonstration grant has made possible the expansion of the HRA's transportation services and the implementation of several new features. However, had the HRA's proposal not been funded, the need for public transportation in the region would have necessitated continued planning and seeking of funds.

C. OVERVIEW OF PLANNING

The organizations that participated directly, or indirectly as advisors, in the planning for the Section 147 demonstration included, besides the HRA:

1. The Chattanooga Area Regional Council of Governments (CARCOG) and the Southeast Tennessee Development District (SETDD).

2. The City of Chattanooga Urban Management Information System (the computer system used by the HRA to monitor its transportation activities).

3. The Chattanooga Area Regional Transportation Authority (CARTA) (the metropolitan mass transit operator).

4. The various service providers dependent on the HRA transportation system.

Planning activities were carried out by the HRA and its transportation Director, Mr. Billie Harmon. Mr. Harmon was assisted by a committee which included a Human Resource Agency planner and a Commission on Aging planner from SETDD, plus another "concerned citizen".

After the HRA's proposal was funded, a Transportation Advisory Committee, consisting of one representative from each county in the service area, was set up. The function of this committee is advisory; policy is set by the HRA's Board of Directors, composed of the nine county judges.

The HRA sought citizen participation during the planning process. Meetings were held in different geographical areas of the region, and announced by advertisements in local newspapers.

Participation in the planning process by citizens' groups, public agencies and federal, state and local governments was also sought. Those that participated, and the role played by each, are listed in Table II.

Letters of endorsement and commitment to support, assist and utilize the HRA's transportation system were supplied by the following individuals and agencies, and were included in the proposal:

Representatives (Judges or Commissioners) of Bledsoe, Bradley, Grundy, Marion, McMinn, Meigs, Polk, Rhea, and Sequatchie Counties
City of Cleveland
Rhea County Department of Human Services
Rhea County Health Department
Ernest A. Forsten, M.D., Dayton, Tennessee
Grundy County Manager
Sequatchie County Department of Human Services
Bledsoe County Health Department
Bledsoe County Manager
Grundy County Department of Education

Sequatchie County Board of Education
Polk County Health Center
Polk County Manager
Bradley County Manager
Bradley County Health Center

The planning methodology included estimation of the transportation needs of individuals by means of an inquiry conducted with existing ridership. The transportation needs of health, social service, Headstart and other agencies were estimated by determining the mileage traveled by outreach and other workers. According to the HRA's Transportation Director, citizen input gave the most accurate forecast of transportation needs.

A report by the State of Tennessee on the transportation needs of the elderly and handicapped[1] was cited as having been consulted and found helpful in the planning process.

D. PLANNING PRIOR TO APPLICATION FOR SECTION 147

Planning activities carried out prior to submission are summarized in Table I. Activities considered most important during this period were:

1. Assessing existing transportation services to determine unmet travel needs and to estimate demand for the new system.

2. Developing a scheme for implementing service.

3. Forming a planning committee.

4. Coordinating planning with local government and local, state and federal agencies.

5. Performing cost and revenue estimates.

6. Developing goals and objectives.

7. Developing type-of-service options.

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[1] Statewide Study of Transportation for Tennessee's Elderly; prepared for the Bureau of Mass Transit, Tennessee Department of Transportation, in cooperation with the Tennessee Commission on Aging. Nashville, Tenn., Kimley-Horn and Associates, Inc., April, 1975.

Problems encountered during the initial phase of the planning process included the cost of preparing the proposal, and the limited time available. The HRA's Transportation Director estimated that he and his planning committee had about twenty days between receipt of the Section 147 final guidelines and deadline for submission (June 10, 1975) in which to prepare the proposal.

E. PLANNING AFTER SUBMISSION OF PROPOSAL

After submitting the proposal, and prior to notification of funding, planning activities consisted mainly in solidifying the HRA's position politically. Representatives and Senators were contacted for their support for the system.

No significant planning problems were encountered during the period between proposal submission and notification of funding.

F. PLANNING AFTER INITIAL NOTIFICATION OF FUNDING

In the period following the HRA's receipt of initial notification that its Section 147 proposal had been funded, the most important planning activities were:

1. Formation of a Transportation Advisory Committee.

2. Assessment of financial resources for the period beyond Section 147 funding.

3. Estimating costs and revenues.

4. Reviewing documents and literature.

One document, a study of the needs of the elderly and handicapped, compiled by the Tennessee Commission on Aging and the Tennessee DOT, was found particularly useful. (This document is cited above in Section C, Overview of Planning.)

G. COOPERATIVE ARRANGEMENTS

As stated above (Section C, Overview of Planning) and in Table II, many federal, state, regional and local governments and agencies participated in the planning process for the Section 147 demonstration and supplied letters of support and endorsement.

Some of these have also contributed to the funding of HRA.

In addition, a large number of agencies have entered into contracts or cooperative transportation arrangements with the HRA. Agencies that have made their own buses available to the HRA to provide services to their clients include: Retired Senior Volunteer Program (RSVP); Regional Child Development Center; Bradley-Cleveland Community Action Agency (CAA); the Cleveland Adult Activities Center, and the McMinn County YMCA. (The YMCA's bus is a 16(b)2 vehicle.) Transportation on these buses, as on all HRA vehicles, is offered to the general public, with priority given to the elderly and handicapped.

The Boards of Education of Bledsoe, Grundy, Marion, Rhea and Sequatchie Counties have contracted with the HRA for transportation of handicapped children. Title VII congregate feeding sites have contracted with the HRA to transport their clients.

The Sequatchie Valley Emergency Medical Service has agreed to turn over three forthcoming 16(b)2 vehicles to the HRA to operate.

H. OVERVIEW OF PROBLEMS IN PLANNING

As stated above (Section D, Planning Prior to Application for Section 147), the major problems encountered in the planning process were those of the limited time available for writing the proposal, and the cost of preparation.

In the regulatory area, an unanticipated problem arose concerning the legality of the system under state PSC regulations. Specific issues were the legality of charging a fare for service, and the provision of charter services across county lines. The HRA sought and obtained revisions of the relevant legislation, which solved the problem.

The HRA's Transportation Director stated that the planners found the Section 147 guidelines "relatively clear", in comparison to most federal guidelines.

The HRA's planning for the Section 147 demonstration was facilitated by its prior experience in operating a transportation system.

I. GENERAL ASSESSMENT OF SYSTEM

The writing of the HRA's Section 147 demonstration took place under severe time limitations - less than one month between receipt of final Section 147 guidelines and the final date for submission of the proposal. However, two factors facilitated the process. One was the availability of some computerized information provided by the City of Chattanooga's Urban Management Information System, which greatly decreased the time and effort necessary for gathering, correlating and tabulating the necessary data. The second was the fact that a coordinated transportation system had been in operation since November of 1974. This operation provided experience which was helpful in projecting the expansion of the system under Section 147.

To these two factors should be added the ability and initiative of the HRA's Transportation Director, Mr. Billie Harmon. Mr. Harmon's abilities as a manager and administrator, as a fund raiser, and in securing popular and political support, and his willingness to take bold initiative, have been a decided asset to the HRA. He has been ably assisted in the planning process by the Human Resource Agency planner and the Commission on Aging planner.

The HRA's transportation system has the support of regional organizations such as CARCOG/SETDD, as well as county governments and local and county health, educational and social service agencies. These organizations and agencies recognize the urgent need for region-wide, coordinated public transportation at a reasonable cost to riders. It is the recognition of need by such organizations and citizen leaders, and their support of the HRA's effort to meet that need, that form the best assurance of the HRA's future success.

APPENDIX

TABLE I - PLANNING ACTIVITIES

ACTIVITY	Before Application	After Application	After Notification
A. Formed a planning committee	X		X
B. Developed goals and objectives	X		
C. Collected and analyzed population and economic data	X		
D. Identified existing transportation sources	X		
E. Assessed existing transportation services to determine unmet needs and estimate demand for new system	X		
F. Estimated costs and revenues	X		X
G. Assessed financial resources for period beyond Section 147 funding	X		X
H. Solicited citizen participation	X		X
I. Coordinated planning with local government and local, state and federal agencies	X		
J. Contacted regulatory agencies, e.g., Public Utilities Commission			
K. Developed type-of-service options	X		
L. Planned routes and schedules			
M. Developed plans for implementing service	X		
N. Solidified position politically		X	
O. Estimated future needs and impacts:			
1. On existing transportation providers			
2. On outlying rural businesses (e.g., closing of county stores due to people shopping in town			
3. On agriculture due to access to jobs			
4. Negative impact on new system due to riders buying cars upon getting jobs			
P. Reviewed documents and literature			X

TABLE II

AGENCY, GOVERNMENTAL AND BUSINESS INVOLVEMENT

Group or Organization	Nature of Involvement
U.S. Dept. of Transportation	Provided information, copies of federal regulations
Tennessee DOT	Helped with interpretation of federal regulations
Southeast Tennessee Development District (SETDD)	Two representatives on planning committee; A-95 review
Southeast Tennessee Commission on Aging	Assisted in planning and writing proposal; letter of endorsement
Title VII congregate feeding sites	Contract to transport clients
Chattanooga Area Regional Transit Authority (CARTA)	Advisory
Counties	CETA slots or direct funds for drivers; in-kind contributions; representatives on Transportation Advisory Committee; letters of endorsement
County Judges	Form Board of Directors; letters of endorsement
County Boards of Education	Contract to transport handicapped children; letters of endorsement
County Health and Social Service Agencies	Letters of endorsement
Retired Senior Volunteer Program; Regional Child Development Center; Bradley-Cleveland CAA; Cleveland Adult Activities Center; McMinn Co. YMCA; Sequatchie Valley Emergency Medical Service	Turned over vehicles to HRA to operate for clients and general public
City of Cleveland	Letter of endorsement
Cleveland, Tenn. Taxicab operator	Letter of cooperation with taxi subsidy program
Citizens	Volunteer escorts for Senior Transportation vehicles; letters of endorsement

TABLE III

FUNDING SOURCES AND ESTIMATED AMOUNTS

SOURCE	FISCAL YEAR 1974-75	1975-76	1976-77
U.S. Department of Transportation			
Section 147			$247,789
16(b)2			72,000
U.S. Community Services Administration (CSA) (formally OEO)	$ 80,000-100,000	$150,000-200,000	358,146
Title III, Older Americans Act	65,000	83,000	56,328
Mid-South Regional Medical Program	31,238	52,000	
ACTION-Retired Senior Volunteer Program (RSVP)		4,000	4,000
Counties (CETA)	35,000	35,000	19,136
Counties (in-kind)	13,000	13,000	13,000
Other in-kind (volunteer escorts for Senior Transportation vehicles)	16,869	16,869	16,000
TOTAL	241,134-261,134	353,896-403,896	786,399

PLANNING SUMMARY
PEE DEE REGIONAL TRANSPORTATION AUTHORITY

A. SYSTEM IDENTIFICATION

PEE DEE REGIONAL TRANSPORTATION AUTHORITY
P. O. Box 2071
Florence, South Carolina 29503
(803) 665-2227

Ms. Nancy G. Finklea, Chairperson
Mr. Peter G. Bine, Executive Director
Mr. Stephen A. Carter (Managing Partner, Stephen Carter and Associates), Consultant

Date of Site Visitation: September 24, 1976

Funding:

Source	Year I	Year II	Year III
Federal DOT (Sec. 147)	$144,375	$ 55,625	N/A
Other Grants and Subsidies			ca $330,000 - 500,000
Fares and Revenues	ca $216,000	ca $216,000	ca $216,000

Date Started: June, 1974

Vehicles:	Number	Capacity (passengers)
	25	12-20
	15	12-15
	11	12
	10	11
	1	10
	4	6
TOTAL	66	

Area Served: Chesterfield, Darlington, Dillon, Marion, Florence and Marlboro Counties and the City of Florence, S.C.

Clientele Served:

1. Governor's Office of Manpower Planning (CETA Transportation)

2. Vocational Rehabilitation (Workshop Transportation)

3. Chesterfield - Marlboro Council on Aging (Feeding Site Transportation)

No service to general public as of January 1, 1977.

System Summary:

The Pee Dee Regional Transportation Authority (PDRTA) is an entirely new entity created to develop, coordinate, and operate a comprehensive public transportation system for a six-county region centering on Florence, South Carolina. The PDRTA will be responsible for coordinating transportation services currently provided by area social service agencies, schools and technical education centers, and expanding these services to the general public.

B. SYSTEM HISTORY

Two major problems led to the creation of the PDRTA. These were the duplication of transportation services being offered by various social service agencies to their clients, and the lack of a transportation system accessible to the general public. Community leaders, seeing this duplication and the need of the general public for transportation, responded with the formation of the PDRTA. An important role was played by an assessment of needs by the Pee Dee Council of Governments. Other contributing factors included a grant of funds from the Federal Highway Administration (FHWA) and the U.S. Department of Transportation (DOT) and contracts with the State Department of Social Services (DSS), the Community Services Administration (CSA) of the U.S. Department of Health, Education and Welfare (HEW), and local planning agencies.

The PDRTA and its consultant, Stephen Carter and Associates, learned of the Section 147 program in 1974 through contacts in Washington. Before learning of Section 147, funding from Community Services Administration had been investigated. Moreover, planning for the system had begun prior to knowledge of Section 147. Though Section 147 was a major factor in the decision to proceed with the PDRTA, community leadership would have been sufficiently strong for the project to go ahead even without Section 147. The citizen leaders of the Pee Dee region perceive the lack of public transportation as a major problem requiring immediate attention and priority treatment.

C. OVERVIEW OF PLANNING

Planning for the Section 147 demonstration was coordinated by the Executive Committee of the PDRTA, chaired by Ms. Nancy G. Finklea.

The PDRTA actively sought public participation in the planning process. Meetings were held in all geographical areas of the region, and announced by newspaper advertisements and by letters. Transportation to meetings was provided to encourage attendance.

Participation of public agencies and federal, state and local governments in the planning process was also sought. Participating agencies are listed in Table II and the part played by each is summarized. A preliminary proposal was submitted to the state for review, and the state Division of Administration was asked for technical assistance.

After the PDRTA was notified that its Section 147 proposal had been funded, a search was begun for a full-time system manager. In the summer of 1976, Mr. Peter Bine was hired as Executive Director of the PDRTA. Formerly a consultant with Wilbur Smith and Associates, Mr. Bine had had considerable experience in transportation.

The total cost of planning for the PDRTA's Section 147 program was $30,000.

Many documents were consulted during the planning process. Most important among these were the Metro Mobility Report* and a report prepared by the Civil Affairs Division, U.S. Army Corps of Engineers, Fort Bragg, N.C., on the transportation needs of the Pee Dee Region.

The planning methodology included determining individual transportation needs by means of a manually developed model based on a public use sample from census data. Estimates of agency transportation needs were based on the number of eligible clients of each agency. The planners stated that the agency need estimates were more accurate than estimates of individual need.

Estimates of business/employer transportation needs are still being made. A summary of planning activities is presented in Table I in the Appendix.

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*Southeast Federal Regional Council, Interagency Task Force. Expanded Metro Mobility: A Report on Rural Transportation. Atlanta, 1974.

D. PLANNING PRIOR TO APPLICATION FOR SECTION 147

Only five weeks were available between the receipt of final Section 147 guidelines and the deadline for submission of the proposal (June 10, 1975). As stated above, Stephen Carter and Associates, consultants retained by the PDRTA, assisted in writing the proposal. The consultant stated that four to six months time would have been useful for researching and writing the proposal.

Planning activities carried out prior to submission of the proposal are summarized in Table I. Most significant were the formation of a planning committee (40 man-hours); the identification and assessment of existing transportation services to determine unmet travel needs and estimate demand for the proposed system (160 man-hours); the collection and analysis of population and economic data (100 man-hours); and the development of plans for implementing service (200 man-hours).

Problems encountered during this initial phase of the planning process included understanding the intent of the Section 147 guidelines as published in the Federal Register, the coordination of information from existing transportation providers, the development of a uniform cost reporting procedure, and the availability of state assistance.

E. PLANNING AFTER SUBMISSION OF PROPOSAL

Many of the planning activities begun before submitting the Section 147 proposal were continued in the three-month interim between submission, on June 10, 1975, and notification of funding in September. Most of these activities are still ongoing (see Table I). However, between submission of the proposal and notification of funding, three important activities were carried out. These were solicitation of support (75 man-hours); solidification of the PDRTA's position politically (50 man-hours); and appointment of board members (10 man-hours).

Although no major problems occured during this three-month period, the planners stated that they experienced "anxiety" waiting for notification of funding.

F. PLANNING AFTER NOTIFICATION OF GRANT

Most of the activities begun in the earlier stages of planning have continued since notification of funding was received in September, 1975 (See Table I). In this postnotification period a consultant was selected to perform Transit Development Planning tasks over an eleven-month work period.

Problems arose in two principal areas during this period. The first was that of obtaining reasonably priced vehicle insurance (See Section H, Overview of Problems in Planning).

The second problem area concerned cooperation of social service agencies and private carriers with the proposed system (See Section G, Cooperative Arrangements).

G. COOPERATIVE ARRANGEMENTS

One of the primary reasons for creation of the PDRTA was the coordination of transportation services being provided by some seventeen social service and educational agencies. The PDRTA sought the participation of these agencies in the Section 147 planning process. This participation is summarized in Table II.

Ownership and operation of the vehicles belonging to these agencies will be vested in the PDRTA. The PDRTA will then contract to provide fixed-route and demand-responsive services to the clients of these agencies. In addition, service will be provided to the general public.

Problems of competition with and possible challenges from private carriers have arisen. One private operator has received permission from the state PSC to provide service in an area proposed to be served by PDRTA. The PDRTA was unaware of this request until it was publicized in a newspaper article.

The PDRTA is also considering providing a higher level of service on some routes currently being served by major inter-city carriers. To avoid conflict the PDRTA is seeking a coordinated and cooperative service arrangement whereby "travel coupons" issued by the PDRTA will be honored for travel in the area by inter-city carriers. The cooperation of the PSC and the carriers is essential for the success of this arrangement.

Another problem relating to coordination is the development of a ticketing and service charging system by which agencies can be charged fairly for services provided to their clients. One constraint is to develop a system that does not openly distinguish social service clients from the general public except for accounting purposes. Such a system must identify the following:

1. Person making trip
2. Trip purpose
3. Time of trip
4. Responsible agency
5. Amount to be paid

At the time of this writing, a tentative system for ticketing and accounting has been developed. Details and guidelines are still being formulated.

H. OVERVIEW OF PROBLEMS IN PLANNING

In the period since notification of funding the PDRTA has encountered serious problems of vehicle insurance. In the bidding for liability insurance on three buses to be operated under contract to the Darlington-Florence Technical Education Center (TEC), only one company responded, offering a rate of $3,200/bus/year, far more than the PDRTA could afford. For this reason the service was terminated, the contract cancelled and the vehicles returned to the school.

Due to federal regulations, service will not be offered to the general public until the PDRTA acquires its own vehicles. Only agency program participants can be carried in agency vehicles operated by the PDRTA. They are working with Atlanta (Region VII) to change this.

For this reason, as of this writing, the PDRTA has coverage only for transportation of "program" clientele. Eight vehicles began service to CETA, under a contract with the Department of Labor, in early December, 1976, and three are expected to begin service to the Chesterfield-Marlboro and Darlington-Florence TEC's early in 1977.

The PDRTA had obtained insurance from the South Carolina Insurance Company. Annual premiums will run between $1,089 and $1,250 for the fleet. These low premiums are due to the fact that only agency clients are being carried. Service to the general public would raise the annual insurance cost to around $16,800.

The PDRTA is applying for insurance relief through the South Carolina Reinsurance Facility and is working with the State Legislature to obtain eligibility to qualify for no-fault or limited liability insurance which is available to other governmental entities.

Problems relating to coordination by the PDRTA of transportation services formerly operated by social service agencies, or arising between the PDRTA and private carriers, have been discussed above (See G., Cooperative Arrangements).

Also mentioned above (See D., Planning Prior to Application for Section 147) were problems experienced with the Section 147 guidelines as published in the Federal Register. In the planners' opinion, these guidelines were not easy to follow, and four to six months time, rather than the five weeks available, would have been useful for writing the proposal. Specific problems included interpretation of the guidelines on allowable operating costs and on ownership of vehicles.

I. GENERAL ASSESSMENT OF THE SYSTEM

The overall planning process was as thorough and comprehensive as time permitted. The PDRTA planners have sought and gained input and support from many social service agencies, educational institutions, federal, state and local government agencies, and the general public.

Serious problems have delayed the start of transit service by the PDRTA. The problem of obtaining vehicle insurance at an affordable price has already been discussed (See Section H, Overview of Problems in Planning). Another obstacle to starting service was the lack of a system manager. The search for a manager was begun after notification of funding in September, 1975, and was only concluded after nine months, with the hiring of Mr. Peter Bine as Executive Director in July, 1976.

Other problems remain, to be solved in time. The Executive Director and his staff will continue to be assisted by Stephen Carter and Associates, consultants, the North Carolina A&T research team and others. In many ways the PDRTA is a prototype for other RTA's which may come into being in South Carolina in the near future. The effectiveness of the PDRTA's approach to its planning and implementation problems will undoubtedly provide a model for future RTA's to study, and possibly, learn to anticipate and avoid the problems that the PDRTA is now tackling.

Most important for the future success of the PDRTA, however, is the mandate it has plainly been given by the people of the area it will serve.

APPENDIX

Table I. Planning Activities

Activities	Before Application (Man Hours)*	After Application (Man Hours)	After Notification (Man Hours)
a. form a planning committee	40	X	
b. identify existing transportation sources	120	X	continuing
c. assess existing transportation services to determine unmet travel needs and to estimate demand for new system	40	X	continuing
d. collect and analyze population and economic data	100	X	continuing
e. solicit citizen participation	10	X	continuing
f. develop goals and objectives	10		continuing
g. coordinate planning with local government and local, state, and federal agencies	10		continuing
h. contact regulatory agencies, i.e. public utilities commission	15		continuing
i. assess financial resources for period beyond Section 147 funding	continuing		continuing
j. perform cost and revenue estimates	developing		X
k. develop type of service options (fixed-route, dial-a-ride)	developing		X
l. develop scheme for implementing service	200		X
m. estimate future needs and impacts			
1. impacts on existing transportation providers	X		X
2. impacts on outlying rural businesses (i.e. closing of country stores due to people shopping in town)	X		X
3. impacts on agriculture due to access to jobs	X		X
4. negative impacts on new system due to riders buying cars upon receiving jobs	X		X
n. review documents and literature	X		X

*X = activity carried out; no estimate of man-hours.

Table II. Profile of Agency, Governmental, and Business Involvement

Group	Nature of Involvement	Commitment
Agencies on Aging	Goals detn., funding information service delivery	ca. $40,000/yr.
Community Service Agencies	Goals detn., information, service delivery	
Agencies for Handicapped	Goals determination	
County Social Service Agencies	Coordinating existing transportation services	
Pee Dee Regional Planning & Devel. Council	Assessment of need, assistance	
U.S. DOT	Advisory	
USCSA (HEW)	Coordination	
S.C. Hwy. Dept.	Tech. assistance	
S.C. Public Service Comm.	Tech. assistance	
S.C. Insurance Comm.	Advice on rates	
S.C. Dept. of Human Resources/Social Services	Contract negotiations, funding	ca. $50,000/yr.
City of Florence	Request to take over municipal service (privately operated)	
Trailways, Greyhound	Information	
County governments	Support	
Voc. Rehab. Agencies	Support, route coordination	
Dept. of Labor	Funding	ca. $60,000/yr.
Technical Education Centers	Support	

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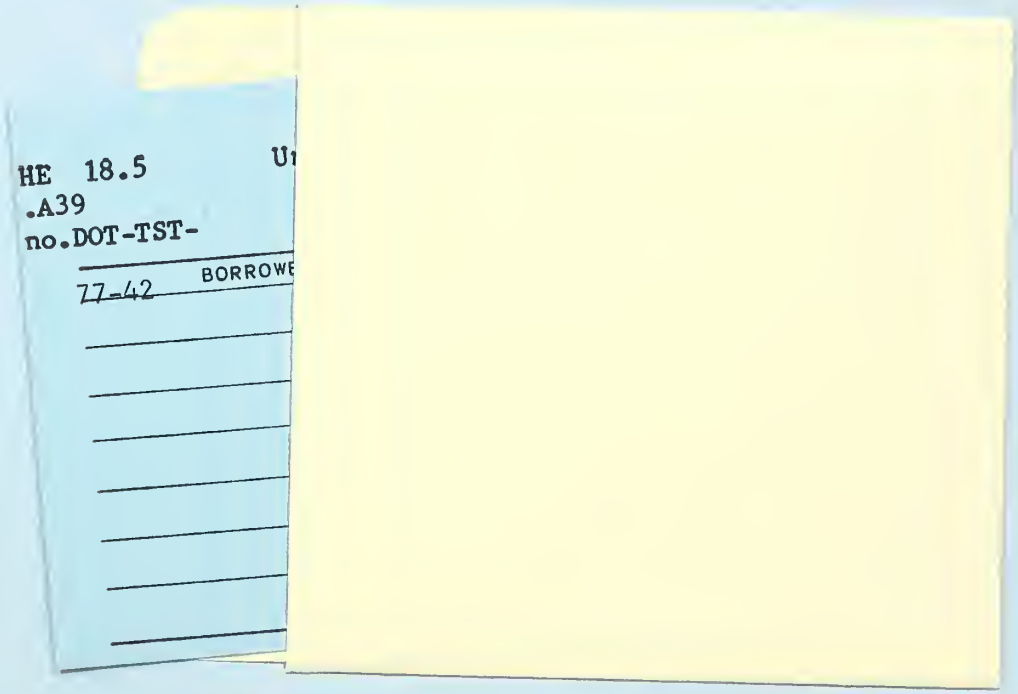

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